

Evaluation of the Step by Step Program

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CHAPTER I: OVERVIEW OF THE EVALUATION

PURPOSE

This program evaluation was funded in 1998 by the United States Agency for International Development (USAID), as part of the Improving Educational Quality Project (IEQ) II. The overarching purpose of the evaluation was to gain a better understanding of the role of child-centered learning strategies in creating democratic, collaborative behaviors at the local level for newly independent states of Eastern Europe and Central Asia. As such, it supports USAID/ENI's strategic goals of democratic transition and social stabilization by examining the role of participatory educational practices in promoting democratic behavior.

The evaluation focused on Step by Step, an ongoing and growing early childhood development program in the ENI sector. Working with host country researchers in four countries—Bulgaria, Kyrgyzstan, Romania, and Ukraine—Education Development Center, Inc. (EDC) examined Step by Step's impact on children, parents, and communities. First, we compared educational performance and developmental progress of preschool children enrolled in the Step by Step program with children in traditional programs. We also investigated the program's effects on families, teachers, and school administrators. Third, using a range of methods, we examined Step by Step programs' institutional capacity and uptake in key educational systems in order to gauge its sustainability. Finally, as with all IEQII initiatives, we sought to build the capacity in applied evaluation and assessment techniques within host countries.

In this chapter, we describe the Step by Step model, discuss the importance of this evaluation and its implications for future policies, and briefly summarize the study methods and instruments.

OVERVIEW OF THE STEP BY STEP MODEL

Since its inception in 1994, the main objective of the Step by Step program has been to turn formerly state-supported day care facilities into centers for child development which promote learning and encourage democratic behaviors among children and their families. The Open Society Institute (OSI) funds the Step by Step program in the belief that educating young children in a manner that encourages family participation and individualized teaching, while supporting children's ability to make choices, will lead to a new generation of citizens equipped to live in democratic societies.¹ The Step by Step model was developed by Children's Resources International, Inc. (CRI) in partnership with OSI, and they continue to refine the model, support the expansion of the program, and create a forum for networking among Step by Step programs operating throughout the world. What began as an ambitious pilot in 15 countries with 250 classrooms is now an accepted educational program in 26 countries with more than 5,636 classrooms implementing the Step by Step methodology.

To better understand the evaluation and the relevance of the instruments used, it is important to have a general notion of the key features of the Step by Step methodology. The Step by Step model is based on four critical elements:

- Family involvement, and parent participation in particular, is a mainstay of the Step by Step model. Families are encouraged to become actively involved in their children's classrooms, working with teachers to implement the curriculum. Family involvement also extends beyond the classroom, as family members often contribute to the larger school community.
- Child-centered curriculum is another key feature which stresses that teaching in Step by Step classrooms should be individualized, reflect the cultures and traditions of participating families, and provide opportunities for child choice and learning through play and experimentation. The classroom is, therefore, organized into activity centers to support the child-centered curriculum.
- To support child-centered practices, the teacher's role is transformed from transmitter of information to facilitator. This has implications for building

¹ P. Coughlin, presentation at International Conference on Early Childhood in Mongolia, 1997.

teachers' understanding of child development and the ways in which they assess learning and development.

- Effective program implementation depends on building collaborative relationships with important educational systems within countries, especially ministries of education and teacher training institutions. Such collaborative relationships need to be established at the kindergarten level as well—among administrators, teachers, and parents.

OSI and CRI have worked together to introduce the program to participating countries. In collaboration with the local OSI foundation, they select a country team that will assume responsibility for launching the program; typically the country team consists of a country director and master teacher trainers. While all programs are required to incorporate the key features mentioned previously, country teams are encouraged to adapt the Step by Step model to fit the unique characteristics and traditions within each country. Such an approach is likely to be a contributing factor to the program's growth.

Since 1994, there has been an increasing demand for Step by Step and the enrollment figures are impressive. The program has not only expanded in size; but also in scope. The program now extends beyond preschool² to primary school, infant and toddler care, and orphanages. Over time, the Step by Step model has also formalized its outreach to institutions of higher education responsible for teacher training. CRI now conducts annual international seminars for faculty. These seminars provide course material on specific aspects of the Step by Step methodology, such as observing young children and learning through play.

Over the past several years, there has been an increasing emphasis on making Step by Step programs self-supporting. Country teams have been encouraged to establish non-governmental organizations (NGOs), and seek administrative independence from local OSI foundations, which initially housed the program. As

² Preschools are referred to as kindergartens throughout the remainder of this report and typically include children between the ages of three and seven, though some kindergartens have historically provided services to infants and toddlers as well.

we launched this study, only Romania had NGO status. As the study has drawn to a close, Bulgaria and Kyrgyzstan have also established themselves as NGOs.³

As Step by Step moves toward organizational independence, the program has also undertaken a new initiative. Programs have worked to establish associations for parents, teachers, and early childhood faculty. The intention is that these associations will become active mechanisms within and across countries to advocate on behalf of children and to sustain the program's philosophy. The move toward NGOs, and the increasing weight placed on these associations, signals that Step by Step may be here to stay—not a fleeting demonstration program.

Increasing demand for the program, informal accounts of its impact, and the energy devoted to creating an infrastructure have suggested that Step by Step has been highly successful in reaching its goals. Host countries view the child-centered methodology and the emphasis on family participation as a powerful way to contribute to the development of democratic ideals and behaviors in children, parents, and the community. Prior to this USAID-funded evaluation, however, the impact of the program on children, families, and teachers, and its effect on local participation in schools has remained anecdotal and has not been studied systematically. Consequently, USAID has undertaken this rigorous evaluation to determine whether these child-centered practices lead to more democratic behaviors at the local level.

Importance of Evaluating This Model

Eastern Europe and Central Asia have had a long tradition of state-supported early childhood education. Even though these child care programs differed in their quality and scope, they could be found in most city neighborhoods and in many towns and villages. With the dissolution of the Soviet Union came social and economic upheaval, which had a profound effect on the social sector—particularly child care. One has only to review UNESCO data that compares attendance rates in preprimary programs from 1989 to 1996 to grasp the magnitude of the impact.

³ CRI reports that Ukraine is currently in the final stages of the application process.

For example, in Bulgaria preprimary enrollment dropped significantly from 93 percent in 1989 to 62 percent in 1996.⁴ Even in newly independent states such as Kyrgyzstan, where attendance had not been as widespread, rates fell precipitously.

The Step by Step program was introduced at a time when the child care system in this sector of the world was foundering, but still operational. Its child-centered methodology directly related to the goals of these newly independent states to build a democratic society. Its climate of openness that invited parent participation and encouraged teachers to make decisions matched the spirit of the revolutionary movement in progress.

Change in well-entrenched, bureaucratic systems are slow and difficult to effect. Yet Step by Step appears to have galvanized the energies of diverse adults and propelled them into an organization that is implementing sweeping changes. By identifying the young child as the lever for change, parents, teachers, administrators, and local authorities seem to have been drawn into a movement that began with the education of young children but could, with time, influence and alter many social institutions. By concentrating its reform efforts on children in the earliest levels of schooling, the Step by Step model is strategically designed to leverage change by building momentum that will gather force as children move through the educational system.

The importance of child-centered, participatory learning programs for promoting democratic behaviors among young children, and the emphasis on family and community participation, suggest an important learning opportunity within ENI countries about the role of education in fostering local empowerment. The program may offer a model for encouraging community initiative to meet social needs. The involvement of local research institutions with the program offers the possibility to create an institutional capacity for assessing the programs and incorporating the findings into pedagogical practice.

⁴ UNICEF (1999). *The State of the World's Children*. Accessed from the World Wide Web on 23 February 1998 at <http://www.unicef.org/sowc99e.pdf>

METHODOLOGY

To evaluate the impact of Step by Step, we used multiple methods including a quasi-experimental design and qualitative approaches. Quasi-experimental methods were used to compare two types of programs—Step by Step and traditional kindergartens—on measures of program quality and children’s learning. We also collected qualitative data that addressed Step by Step programs’ sustainability and related capacity to stage other community-based initiatives.

During the initial start-up of the evaluation, EDC’s research team worked closely with the staff of CRI and the Step by Step leadership within each of the four host countries: Bulgaria, Kyrgyzstan, Romania, and Ukraine. We worked together to refine the study questions and gather preliminary data so that the methods and instruments used could effectively assess the program’s impact. We also recruited four highly qualified in-country research coordinators who served as essential collaborators throughout the entire research effort. We collaborated on the study design, instrument selection and adaptation; research coordinators also monitored the quality of data collection.

We devised research methods and instruments to address the following research questions:

1. Are the educational performance and developmental progress of Step by Step children comparable to those of children in traditional programs?
 - How do children compare on mathematical, literacy, problem solving, and creative measures?
2. What democratic concepts are children learning in Step by Step classrooms (making choices, accepting responsibility for choices, taking initiative, valuing individual expression, and contributing as a member of a learning community)?
 - Is there evidence that program staff and/or children are practicing these concepts outside of the classroom setting? With families? Within the school community? With other community groups?
3. How do Step by Step teachers and teachers in traditional classrooms differ with respect to their approach to teaching?

- What are the differences in their perceptions of their roles?
 - What differences exist in teachers' understanding of children's learning and child development, especially with respect to children's individual variation?
 - How do teachers use resources available from their school community and larger community to improve their practice?
4. To what extent are parents, extended family, and community members actively engaged in the implementation of the Step by Step program?
 - How has their participation altered the program?
 5. What is the potential for Step by Step programs to become centers for staging broader community-based activities such as elder care, health care, adult education, or serving as distribution centers for goods and services?
 6. To what extent can the interests and energies of engaged parents also be directed towards other community development initiatives?
 7. Can the Step by Step program become sustainable (economically and in practice)?
 - What, if any, organizations have been formed to help sustain the program?
 - How have these organizations been formed?
 - What evidence is there of an increasing demand for the Step by Step program?

Instrumentation and Data Collection

EDC worked closely with CRI in the early stages of the project to refine the study design and to prepare draft instruments for the initial wave of data collection. Because kindergartens in all four countries close or alter their program content for the summer months, it was critical to finalize child assessment and classroom observation instruments and collect these data by early June 1998. After examining more than 20 instruments, EDC identified three child assessment instruments and two classroom observation instruments that were appropriate assessments for the constructs to be measured and could be adapted for use in all four countries. Since we were unable to locate a commercially available instrument to assess key components of early literacy, we adapted a tool we had developed for our ongoing program of domestic research in early childhood.

While we shared our initial thinking about study instruments with research coordinators, the careful examination of possible instruments and the resulting

decisions occurred in a cross-country research meeting Bucharest, Romania in April 1998. This face-to-face meeting and subsequent gatherings were important for establishing critical understandings among our international team of researchers.

To ensure the validity of the child assessment instruments and the classroom observation tool, each research coordinator conducted a pilot test of the instruments and its adaptations. The pilot involved assessing children in both Step by Step and traditional programs and evaluating the results in conjunction with the U.S. research team. To test the reliability and validity of the draft observation tool, research coordinators along with Step by Step master teacher trainers, conducted joint classroom observations in both settings. Pilot test data led to adaptations of all child and classroom instruments, which were implemented and monitored by U.S. researchers. All tools were translated into Bulgarian, Kyrgyz, Romanian, Russian, and Ukrainian.⁵ The Russian versions were used both in Ukraine and Kyrgyzstan where there are large Russian-speaking populations. Translated versions were reviewed by educational experts within each country to ensure that the constructs were accurately represented.

In spring 1998, research coordinators hired data collectors to administer child assessments and conduct classroom observations. Because participation in the study offered the chance to learn new applied research methods, research coordinators were able to recruit an unusually skilled cadre of data collectors for this effort, including faculty from prestigious universities. In Ukraine, for instance, several notable developmental psychologists served in this capacity; in Bulgaria, graduate students competed for data collector positions.

Although recruitment was highly successful, research coordinators in all four countries trained a greater number of candidates than actually would be needed. In this way researchers had the opportunity to select individuals who demonstrated the best understanding of the methods and who were able to reliably code observations and child performances. Data collector training was divided into two

⁵ OSI New York provided the necessary funds for these translations.

five-day segments: one for the child assessment instruments and another for classroom observation. In most instances different data collectors were trained to administer child and classroom assessments, since there was limited time available and simultaneous data collection was necessary. Training was conducted onsite in each country by a team composed of a U.S researcher and the local research coordinator. In addition to a thorough review of conceptual underpinnings of the study design, our training involved using the instruments with children in actual classrooms. We also had extensive conversations about coding decisions, which helped us identify which of the trainees were best qualified to carry out the data collection activities.

While onsite in host countries, we also worked closely with local research coordinators to review procedures for random selection of child sample, set up systems for data management, and design mechanisms for quality control during data collection.

Child and Classroom Data Collection and Analysis

Data collection occurred primarily during May 1998 in five locations in each of the four countries. During this period child assessment batteries were completed on 587 children and classroom observations were conducted in 120 classrooms. At the same time, 182 teachers in Step by Step and traditional programs completed surveys instruments. Research coordinators traveled with data collectors and worked with them to resolve problems encountered and to monitor their efforts. In addition to reviewing score sheets, research coordinators, whenever possible, paired with each data collector to conduct a focused observation. By comparing and discussing their respective coding decisions, these joint observations served as recalibration sessions.

Research coordinators also debriefed with data collectors as they returned their material. Score sheets were reviewed, inventoried, and sent to EDC for data entry. Once received in the U.S., data were checked, prepared for entry, double entered, and cleaned by EDC research assistants.

We primarily used analysis of variance and analysis of covariance models to compare group means from Step by Step and traditional groups. Statistical significance and confidence intervals were calculated to assist with the process of statistical inference. Effect size measures were calculated (η^2 and/or Cohen's d) when practical to assess the size and importance of the differences between groups. For categorical variables, contingency table analysis was used to compare percentages for the Step by Step groups and traditional groups. Pearson χ^2 tests were used to test statistical significance, and phi and Cramer's phi statistics to measure effect size. Occasionally missing data reduced the Ns reported below, though missing data were minimal throughout the study.

A second cross-country meeting was held in Budapest, Hungary in November 1998 to discuss and interpret the preliminary results from the first phase of data collection, i.e., classroom observation, direct child assessments, and data from teacher surveys. In addition, instruments and methods were reviewed for the second wave of data collection and procedures for data collection were established. Since this phase involved more qualitative approaches, such as interviews with policy makers, research coordinators were responsible for this data collection.

Limitations of Research Design

Undertaking an international research effort of this scope in less than a 12-month period was a challenge. Because of the time and logistical constraints, our ability to answer the key question about the program's impact on children is limited for three main reasons. First, we were only able to collect data at one point in time. It would have been preferable to collect data at two or more points in time to enable us to determine the amount of growth children made while in kindergarten.

Second, we had very little information about children's families, leaving open the possibility that children in Step by Step and traditional classrooms came from different kinds of homes. We attempted to control for this problem by drawing our two groups of children from the same schools and by identifying the child's home language and their ethnicity. Also, we used a random selection procedure to

ensure as much comparability as possible between the two groups. Nonetheless, there could be systematic biases in the selection of families whose children attend one type of kindergarten or another. Third, we had no tests with norms for the countries where we were collecting data; therefore we could not compare the developmental status of children we were testing with expected developmental levels for the country.

We must also acknowledge an important limitation in the classroom data collection procedure. We were not able to carry out formal evaluation of interrater reliabilities, though we did take steps to ensure the accuracy of classroom observation data, as research coordinators informally checked the coding decisions of data collectors in several ways (as mentioned previously).

STUDY SAMPLE

City/Kindergarten Sample

In order to select our sample, we gathered data from each country team regarding the location and characteristics of kindergartens that first adopted the Step by Step methodology when the program was introduced. In each country, there were between seven and ten kindergartens in the initial wave of funding in 1994 and 1995 and we elected to examine five of these in each country. Each kindergarten had both initial Step by Step classrooms as well as expansion classrooms. Expansion classrooms were added after the first year of operation and received less resources for start-up than did initial Step by Step classrooms. To select the five cities and, therefore Step by Step kindergartens, we considered a number of factors including: the urbanicity of the city/town, its distance from the central office of the country team, geographic diversity, and presence of ethnic minorities in the population.

The sample consisted of five Step by Step and five traditional kindergartens in each of the four countries (see Table I.1 below). Traditional kindergartens were selected from the same city and neighborhood, where possible, and were also

matched according to the characteristics mentioned above. With the exception of one kindergarten in Ukraine, two initial classrooms and two expansion classrooms were selected from each of the five Step by Step kindergarten sites in each country.⁶ Two classrooms were also selected from five traditional kindergartens in each country. Thus, there was a total of 10 kindergartens (30 classrooms) per country or a total of 40 kindergartens and 120 classrooms across countries.

Table I.1: Kindergarten, Classroom, and Child Samples

	Per Country		Overall	
	Step by Step	Traditional	Step by Step	Traditional
Number of kindergartens	5 (6) ^a	5	21	20
Number of classrooms per kindergarten	4 (2 initial; 2 expansion)	2	—	—
Total number of classrooms	20 (10 initial; 10 expansion)	10	80 (40 initial; 40 expansion)	40
Total number of children	70 ^b (83)	70 (84)	293	294

In order to be included in the sample, Step by Step kindergartens met the following criteria:

- They contained at least two Step by Step initial classrooms, that is classrooms that have been using the Step by Step methodology since the inception of the program in the country.
- More than 50 percent of the children in the initial classrooms participated in Step by Step for at least two years.
- Children in initial Step by Step classrooms ranged in age from five to seven years old.
- Teaching staff in initial Step by Step classrooms had been employing the Step by Step methodology for at least a two-year period.

⁶ In one of the five cities in Ukraine, expansion classrooms had to be selected from a nearby Step by Step program that was closely matched to the initial kindergarten program.

^a Numbers in parentheses indicate sample size in Ukraine.

^b Seven per classroom, on average. Children in expansion classrooms were not part of this study.

When possible, we selected Step by Step kindergartens that had at least two expansion classrooms serving children within the specified age range. When kindergartens in the sample contained more than two initial and/or expansion classrooms, we randomly selected those classrooms that were included in the study.

Child Sample

The child sampling plan was to include 140 children from each of the four countries—70 from initial Step by Step and 70 from traditional classrooms, for a total of 560 children. Because Ukraine included additional children in the sample—83 children from Step by Step classrooms and 84 children from traditional classrooms—it brought the total to 587 children across all four countries. Children were selected according to a stratified, randomized method with gender being the criterion for stratification. This sample size was selected because it enabled us to detect moderate effect sizes, i.e., those that are educationally relevant. See Tables I.2 and I.3 for a presentation of child demographics.

Table I.2: Child Demographics—Gender

	Step by Step		Traditional	
	N	%	N	%
Male	138	48	129	44
Female	152	52	162	56
Total	290^a	100	291	100

^a Relevant data not available for three children from each condition.

Table I.3: Child Demographics—Age

Age (yrs)	Step by Step		Traditional	
	N	%	N	%
4	12	4	21	7
5	81	28	90	31
6	147	50	145	49
7	53	18	38	13
Total # of Children	293	100	294	100
Mean Age	5.82		5.68	

STUDY INSTRUMENTS

To address the research questions, we used ten instruments that included child assessments in the areas of numeracy, literacy, and creative thinking. (See Figure I.1 for a matrix relating instruments to research questions.) Instruments that gathered data at the kindergarten level included an observation tool, as well as teacher and director surveys. At the country level, we developed surveys, interview protocols and rating scales that gathered qualitative data about the nature of program implementation, its diffusion into key educational systems, and the organizational capacity of the country-level Step by Step programs. A more detailed description of study instruments and their psychometric properties can be found in Appendix I. Instruments developed specifically for this study can be found in Appendix II.

Child Assessments

- **Test of Early Mathematics Ability, Second Edition (TEMA-2)**⁷. The TEMA-2 is a commercially available instrument, specifically designed to assess the mathematical thinking skills of young children who may not yet be readers. It measures informal mathematics awareness (e.g., relative magnitude concepts, counting skills) and also assesses children's abilities in formal mathematics (e.g., knowledge of conventions, number facts, calculation skill).

⁷ Ginsburg, H.P. & Baroody, A.J. (1990). *Test of Early Mathematics Ability, Second Edition*. Austin, TX: PRO-ED.

FIGURE I.1: DATA SOURCES FOR RESEARCH QUESTIONS

Research Question Addressed	Instrument	Measurement Techniques
1. Is the educational performance of Step by Step children comparable to children in traditional programs?	TEMA ELA PPVT TTCT	Individual child assessments (initial, traditional)
2. What democratic concepts are children learning?	ECCO TBPS	Classroom observation (initial, expansion, traditional) Survey: teachers (initial, expansion, traditional)
3. How do Step by Step and traditional teachers differ in their teaching approaches?	ECCO TBPS KDQ MEI	Classroom observation (initial, expansion, traditional) Surveys: teachers (initial, expansion, traditional); kindergarten directors (initial) Interviews: ministries of education, local authorities
4. How do families and communities engage in the implementation of Step by Step?	ECCO TBPS KDQ PROSE PI MEI	Classroom observation (initial, expansion, traditional) Surveys: teachers (initial, expansion, traditional), kindergarten directors (initial), country teams Self-assessment: country teams Interviews: ministries of education, local authorities
5. What is the potential for Step by Step programs to become centers of broader community-based activities?	KDQ PI MEI	Surveys: kindergarten directors (initial), country teams Interviews: ministries of education, local authorities
6. Are the energies of parents directed toward other community development initiatives?	KDQ PI MEI	Surveys: kindergarten directors (initial), country teams Interviews: ministries of education, local authorities
7. Can the Step by Step program become sustainable?	ECCO TBPS TEMA ELA PPVT TTCT KDQ PROSE PI MEI	Individual child assessments (initial, traditional) Surveys: kindergarten directors (initial), country teams Self-assessment: country teams Interviews: ministries of education, local authorities

ECCO = Early Childhood Classroom Observation
TBPS = Teacher Beliefs and Practices Survey
TEMA = Test of Early Mathematics Ability
ELA = Emergent Literacy Assessment
PPVT = Peabody Picture Vocabulary Test

TTCT = Torrance Tests of Creative Thinking
KDQ = Kindergarten Directors' Questionnaire
PROSE = Participatory Results-Oriented Self-Evaluation
PI = Program Implementation Survey
MEI = Ministry of Education Interview

- **Emergent Literacy Assessment (ELA).**⁸ EDC developed the ELA to assess various aspects of children's progress in early literacy development in four areas: 1) Letter Identification, 2) Emergent Writing, 3) Early Reading, and 4) Print Concepts and Reading Comprehension.
- **Adapted Peabody Picture Vocabulary Test, Third Edition (PPVT-III).**⁹ The PPVT-III was adapted to assess children's receptive vocabulary.
- **Torrance Tests of Creative Thinking (TTCT).** The TTCT is an instrument designed to assess the important characteristics of creative thinking on the dimensions of fluency, flexibility, and originality. Due to time constraints, we used only two activities of the verbal subtest of the TTCT: Product Improvement and Unusual Uses.

Kindergarten Classroom Instruments

- **Adapted Early Childhood Classroom Observation (ECCO).** We adapted the Early Childhood Classroom Observation (ECCO), an instrument developed by the National Association of the Education for Young Children (NAEYC) for use in program evaluation. The ECCO is organized into five sections: 1) Interactions Among Staff and Children, 2) Curriculum, 3) Physical Environment, 4) Nutrition and Food Service, and 5) Family Participation.
- **Teacher Beliefs and Practices Survey (TBPS).** EDC created the TPBS to gather data from all teachers in observed classrooms. The instrument is organized into four sections: 1) Teacher/Classroom Background Information, 2) Parent Involvement, 3) Beliefs and Practices, and 4) Goals for Children.
- **Kindergarten Directors' Questionnaire (KDQ).** The KDQ was designed to gather information on the overall nature of administrative practices in kindergarten. The 66 questions, including both open-ended and forced-choice, were developed to capture the nature and extent of participation of teachers, parents, and community members in the operation of the kindergarten since the adoption of the Step by Step model.

Institutional Capacity Instruments

- **Participatory Results-Oriented Self-Evaluation (PROSE).** PROSE is a methodology designed to engage cross-hierarchical teams in a process to assess organizational capacity. It uses a method of group discussion paired with individual ratings of items to identify areas of high and low

⁸ The ELA was an adaptation of the Early Literacy Profile developed by David K. Dickinson and Carolyn Chaney, ©Education Development Center, Inc., 1998 with permission of the authors and publisher.

⁹ Dunn, L.M. & Dunn, L.M. (1997). *Peabody Picture Vocabulary Test, Third Edition*. Circle Pines, MN: American Guidance Service, Inc.

performance.¹⁰ For this evaluation, we developed 103 items organized into five critical capacity areas: 1) Organizational Learning for Quality Control, 2) Teamwork, 3) Staff Development, 4) Sustainability, and 5) Innovation.

- **Program Implementation Survey (PI).** This instrument was designed to gather quantitative and qualitative information regarding program implementation in each country. Completed by the Step by Step country director in consultation with other key members of the country team, the PI assessed the infrastructure of the Step by Step program, the way it supports its kindergartens, and its collaborative effort with other educational institutions in the country.
- **Ministry of Education Interview Protocol (MEI).** EDC designed this interview protocol to gather information about the impact of Step by Step on educational policy and practice from the perspective of key educational policy makers within all four countries. The protocol was divided into three parts: 1) Collaboration, 2) Policies, and 3) Step by Step's Place in Educational Reform.

¹⁰ Levinger (Education Development Center, Inc.) and Bloom (PACT) served as consultants on the project to assist in the development of an instrument tailored for this evaluation.

CHAPTER II: IMPACT ON DEMOCRATIC CLASSROOM PRACTICES

There are many ways that early childhood classrooms support young children in acquiring habits of mind that are consistent with democratic principles. Indeed, many of the core values of child-centered practice support the acquisition of democratic ideals and behaviors. But it is difficult to directly assess children's acquisition of values and behavioral tendencies, and there are no established methods to conduct such an assessment. It is possible, however, to examine children's classrooms, thereby discovering the opportunities children have to become familiar with practices and values central to democratic societies.

In this chapter we report our findings that relate to children's democratic practices and address the research question:

What democratic concepts (e.g., making choices, accepting responsibility for choices, taking initiative, valuing individual expression, and contributing as a member of a learning community) are children learning in Step by Step classrooms?

The principal data source for these findings was an adapted version of the Early Childhood Classroom Observation instrument (ECCO), which was used by trained data collectors as they observed Step by Step and traditional classrooms. The summary scores for the ECCO subscales provide important evidence of the overall nature of children's experiences. Certainly the most effective way to acquire democratic values is by learning and playing in environments infused by them. As these scores indicate (see Table II.1), Step by Step classrooms have consistently implemented those practices associated with the development of democratic values and behaviors that are valued by the ECCO items. Democratic practices are pervasive in Step by Step classrooms, contrasting sharply with practices evident in traditional settings.

Following the summary scores, we examine our results in more detail. We focus on selected items because they are consistent with the following five core dimensions of classrooms that help foster acquisition of democratic practices:

- Teacher-child interaction supports children's development of a sense of individuality, initiative, and questioning.
- Activities support children's development of a sense of individuality through expression of their own ideas and experiences.
- Children are encouraged to make decisions on their own.
- Children are part of a community that respects the rights of all.
- Children are engaged in decision making with adults; rules are not imposed in an arbitrary manner.

CLASSROOM OBSERVATION RESULTS

We will first review overall patterns of results from the ECCO, using results for the three global subscales that we used. We will then move to more extended discussion of results at the level of individual *items* and the *indicators* that were used to arrive at item scores. *Items* are an overview of a particular, salient aspect of classroom behavior, such as *Item B-5D, activities that encourage initiative and sense of independence*. *Indicators* are observable aspects of an item in the classroom, such as *B-5d-7, the presence of sand and water toys*. While overall results give a general sense of the patterns across the Step by Step and traditional models, it is data at the item and indicator levels that provide insight into actual classroom practice.

Overall Patterns

The ECCO has three global subscales:

- The Staff-Child Interaction subscale was composed of 15 items with 21 indicators and focused on how staff interacted with children (e.g., availability and responsiveness, tone of interactions with children), how staff managed behavior (e.g., do not use physical punishment), and how values were inherent in their ways of interaction (e.g., encourage prosocial behavior, treat all children equitably).

- The Curriculum subscale included 21 items with 36 indicators and examined how the classroom day was organized (e.g., daily schedule, transitions between activities), the quantity and nature of materials available (e.g., puzzles, unit blocks), developmental areas that the classroom supported (e.g., creativity, physical development, literacy, social skills), and values inherent in the curriculum (e.g., respect for cultural diversity, encouragement of thinking and reasoning).
- The Physical Environment subscale included 5 items with 15 indicators and focused on the overall organization of the physical environment (e.g., space accommodates different-sized groups) and on nutrition and meal times.

See Appendix III for detailed, country-specific ECCO data tables.

As shown in Table II.1, classroom observation data provide overwhelming evidence that Step by Step initial and expansion classrooms more often function in ways consistent with democratic values than do traditional classrooms. For each subscale, statistical tests revealed no significant difference between initial and expansion classrooms and highly significant differences when initial and expansion classrooms were compared with traditional settings. Not only did initial and expansion classrooms display more highly-valued democratic practices than did traditional classrooms, but the overall level of performance was also impressive. The mean subscale scores of 2.61 out of a possible 3.00 for *Staff-Child Interaction* and 2.60 for *Curriculum* reflected average ratings that fall between “partially met” and “fully met” across all items. Additionally, the mean score of 2.90 for initial classrooms on the *Physical Environment* subscale was very high, indicating that most classrooms fully met the requirement of each item in this subscale. Expansion classrooms also rated well on this scale (2.73), far higher than the traditional classrooms (1.60). Thus, the overall picture provided by the classroom observational data is that initial and expansion Step by Step kindergartens are functioning in ways that approach what would be expected of high-quality preschools that provide developmentally appropriate experiences for children.

Table II.1: ECCO Subscales

Subscale	Country	Step by Step			Expansion			Traditional			Signif.
		M	SD	n	M	SD	n	M	SD	n	
<i>Staff-Child Interaction</i>	Bulgaria	2.76	.31	10	2.68	.28	10	2.37	.41	10	I,E>T ¹
	Kyrgyzstan	2.81	.19	10	2.73	.28	10	2.16	.48	10	I,E>T
	Romania	2.57	.21	10	2.73	.37	10	2.06	.34	10	I,E>T
	Ukraine	2.68	.29	10	2.41	.25	10	1.82	.41	10	I,E>T
	<i>OVERALL</i>	2.71	.44	40	2.61	.31	40	2.10	.44	40	.0001
Subscale	Country	M	SD	n	M	SD	n	M	SD	n	Signif.
<i>Curriculum</i>	Bulgaria	2.76	.16	10	2.64	.27	10	2.23	.29	10	I,E>T
	Kyrgyzstan	2.88	.10	10	2.84	.20	10	2.05	.38	10	I,E>T
	Romania	2.48	.23	10	2.33	.35	10	1.88	.31	10	I,E>T
	Ukraine	2.70	.23	10	2.57	.28	10	1.85	.21	10	I,E>T
	<i>OVERALL</i>	2.70	.23	40	2.60	.32	40	2.00	.33	40	.0001
Subscale	Country	M	SD	n	M	SD	n	M	SD	n	Signif.
<i>Physical Environment</i>	Bulgaria	2.9	.32	10	2.7	.48	10	1.7	.48	10	I,E>T
	Kyrgyzstan	3.0	0	10	2.9	.32	10	1.7	.68	10	I,E>T
	Romania	3.0	0	9	2.7	.48	10	1.5	.71	10	I,E>T
	Ukraine	2.7	.48	10	2.6	.52	10	1.5	.53	10	I,E>T
	<i>OVERALL</i>	2.90	.31	39	2.73	.45	40	1.60	.59	40	.0001

A Closer Look

To understand more fully how experiences for Step by Step children differ from those of children in traditional classrooms, we will discuss specific results related to each of the five core dimensions of democratic practice described earlier.

¹ This convention is used to indicate that Step by Step initial and expansion classrooms have consistently higher means. But, because of the small sample size for each country, there is not enough statistical power for an adequate test of the differences between means within each country.

Teacher-Child Interactions Encourage Individuality, Initiative, and Questioning

The most important way that teachers support children's emerging sense of independent initiative is the manner in which they relate to children. By engaging children in extended conversations about their experiences, they help children develop a sense of their own individuality. As teachers challenge children's thinking, they help children see themselves as independent thinkers. These qualities of interaction are captured by the Staff-Child Interaction Item A1.² On this item, Step by Step programs were rated almost a full point higher than traditional programs (2.77 & 2.75 vs. 1.85). The differences were seen most clearly in Indicator A1-3, *meaningful conversations*, where sustained, meaningful conversations were more than twice as likely to be seen in Step by Step settings than in traditional settings (90% & 90% vs. 40%).³ Similarly, Step by Step staff were much more likely to encourage children to use language (Item A3b: 2.63 & 2.33 vs. 2.0).⁴ Indicators associated with this item reveal that Step by Step settings were usually twice as likely to use practices such as speaking at children's eye level (A3a-3: 90% & 83% vs. 43%), speaking to individual children often (A3a-1: 83% & 87% vs. 40%), and encouraging children to discuss their experiences (A3b-2: 77% & 50% vs. 40%).

Teachers' support for children's discovery and expression of their own individuality were also indicated by teachers' support for children to express their feelings and their willingness to comfort children (A-8b). Once again, this item showed that Step by Step initial and expansion classrooms were essentially the same (2.5 vs. 2.55), and well above the rating given traditional classrooms (1.89). Similarly, Step by Step classrooms were much more likely to be rated as

² To help clarify levels of analysis used, item names and item level data will be in standard font and indicator names and data will be italicized.

³ Indicators are rated by observers as "present" or "not present." Therefore, the results are represented using the mean percentage of classrooms where the indicator was observed.

⁴ Mean scores for items and indicators will be reported within parentheses in a consistent order, with Step by Step initial classrooms listed first, expansion classrooms second, and traditional classrooms third. To simplify the text, classroom type will not be listed each time.

encouraging children to express themselves creatively through varied art projects (Item B-7g: 2.55 & 2.30 vs. 1.64).

Activities Encourage Initiative and Sense of Independence

The nature of activities and materials provided to children strongly influenced opportunities children had to think for themselves and engage in problem solving. Children in Step by Step settings were far more often rated as being encouraged to reason and think for themselves (B7c: 2.58 & 2.48 vs. 1.78). These overall differences were reflected in the observation that Step by Step children had more opportunities to participate in open-ended activities (B7c-3: 87% & 73% vs. 50%), and were more often provided new materials to stimulate their thinking (B7c-2: 87% & 80% vs. 47%).

Another central feature of child-centered practice is provision of varied materials and areas in the classroom where children can engage in self-directed activity. For this to occur children need materials and areas in the room that can accommodate groups of different sizes. There was clear evidence that children in Step by Step settings had greater access to child-centered materials than did children in traditional classrooms (B-5d; 2.89 & 2.7 vs. 1.75). Differences were especially noteworthy with respect to materials that foster acquisition of mathematical concepts such as unit blocks (B5d-2: 100% & 93% vs. 40%) and sand and water toys (B5d-7: 87% & 77% vs. 13%). Step by Step classrooms were also far more likely to be organized in ways that enabled children to work independently on different activities. Appropriate spaces to accommodate small and large groups were always seen in Step by Step settings, but were less evident in traditional kindergartens (G2: 2.95 & 2.98 vs. 2.13). In Step by Step kindergartens these spaces were far more likely to be set up to accommodate varied kinds of learning activities (G3: 2.90 & 2.73 vs. 1.60) such as science (G3-4: 97% & 77% vs. 40%), art and music (G3-3: 97% & 100% vs. 57%), and quiet use of books (G3-5: 97% & 97% vs. 47%).

Children Are Encouraged to Make Decisions on Their Own

A hallmark of child-centered early childhood practice and of democratic societies as well is the obligation to make responsible, independent choices. When interacting with children, Step by Step teachers were generally more likely to encourage children's independence (Item A5: 2.80 & 2.70 vs. 2.31). The most telling difference between classrooms was shown by the indicator reflecting children's opportunity to choose their own activities: Step by Step classrooms were approximately three times more likely to make such choices available (*A5-3*: 90% & 87% vs. 27%). Similar striking differences were apparent on the *Curriculum* item "materials and time for children to select activities," with Step by Step classrooms receiving considerably higher ratings than traditional classrooms (*B8*: 2.85 & 2.68 vs. 1.55).

Children Are Contributing Members of a Community That is Respectful of All

An ideal of democracies is that members contribute to the life of the community and everyone has equal access to participation. Across all classroom conditions we found that children were encouraged to assume responsibility for their classrooms (*B7b-2*: 90% & 70% vs. 80%), and to assume responsibility for themselves (*B11-2*: 100% & 93% vs. 93%). It would seem that, in these countries, values related to assuming responsibility for one's self and one's group are integrated into the fabric of most kindergartens. Less common in kindergartens in these countries were interactional patterns and curriculum that were free of bias. There was clear evidence that Step by Step programs were more successful in avoiding bias linked to culture, as indicated by their generally high rating on Item A4a (Staff treat children of all backgrounds equally: 2.62 & 2.46 vs. 2.13) as well as listening to children with attention and respect (*A2-1*: 100% & 93% vs. 57%). *Curriculum* Item B7h, "Cultural diversity is respected," also indicated that Step by Step kindergartens were more likely than traditional programs to provide materials and activities reflecting and respectful of multiple cultures. Gender equity in patterns of teacher-child interactions also was generally apparent among all

classrooms sampled, but differences among kindergarten models were less striking (A4b: Staff give males and females equal opportunities: 2.55 & 2.63 vs. 2.28).

Children Are Engaged in Decision Making With Adults

Early childhood classrooms are communities that are governed by sets of expectations and rules. As in all communities, there are times when problems arise that must be resolved. In child-centered classrooms, just as in democratic societies, the ideal is that the members of the community have a voice in resolving problems. Similarly, throughout the day, teachers must respond to problems among individuals and orchestrate changes from one activity to the next. These management challenges can either be met in a manner that allows children to retain a sense of control, or in an arbitrary or regimented fashion that diminishes children's sense of control. For example, when resolving conflicts, teachers can explain the reasons for their actions or they can simply stop the undesirable behavior or reprimand children. Similarly, when changing activities, children can be allowed to move as they are ready, or changes can be imposed and regimented.

The ECCO provided evidence that, in Step by Step, kindergarten teachers were involving children in decisions that govern their lives. Teachers in these kindergartens more often used positive approaches to children's behavior (A6a: 2.45 & 2.25 vs. 1.58). The indicators associated with this item reveal that children were more likely to be involved in making and understanding the rules (*A-6a-1*: 73% & 67% vs. 43%). The manner in which teachers resolved problems also reflected approaches that tended to give children a sense of involvement in the process, as Step by Step teachers discussed alternative solutions to problems (*A11-2*: 57% & 57% vs. 33%). Finally, teachers in Step by Step kindergartens handled major transitions involving the full group in a far less regimented manner (B9: 2.70 & 2.55 vs. 1.93), as shown by the finding that teachers were four times less likely to require children to move between activities as part of a full group (*B9-2*: 90% & 93% vs. 23%).

SUMMARY

If one accepts the basic premise of this report—that high-quality, child-centered, early childhood practice is consistent with democratic principles—then these results provide clear evidence that, compared with traditional classrooms, Step by Step and expansion classrooms more often and more consistently provide children with experiences that foster acquisition of patterns of belief and behavior required for effective citizenship in democratic societies. These data illustrate Step by Step teachers' outstanding ability to implement the Step by Step methodology with fidelity. This is an especially noteworthy achievement since the Step by Step program is only four years old in these countries. As shown by the data presented, there is little evidence of democratic practices in traditional classrooms, which points to the enormous strides Step by Step programs have made in such a short time. Moreover, one can infer that the methodology was introduced to these countries in a consistent and compelling way, and that the ongoing support provided by country teams continues to reflect the critical features of the model.

CHAPTER III: IMPACT ON THE SCHOOL COMMUNITY

A climate of openness is characteristic of democratic schools. Such a climate enables meaningful participation by teachers, children, and their families. In the previous chapter, we reported the ways in which democratic practices were evident in classrooms and explored the significant differences between Step by Step classrooms and those in traditional kindergartens. Many of the practices observed in Step by Step classrooms are indicators of children's level of meaningful participation in the classroom community. In this chapter we examine the impact of the Step by Step methodology on the wider school community, specifically addressing the following research questions:

How do Step by Step teachers and teachers in traditional classrooms differ with respect to their approach to teaching?

To what extent are parents, extended family, and community members actively engaged in the implementation of the Step by Step program? How has their participation altered the program?

First, we focus on teachers' differing perceptions of their roles and the impact of Step by Step on teachers' and kindergarten directors' democratic beliefs and practices. Next, we turn our attention to the nature and extent of parent involvement in Step by Step kindergartens. Here also we examine how Step by Step programs encourage family participation, with special attention to parents' involvement in governance as a marker of democratic schools.

IMPACT ON TEACHERS

To further investigate the impact of Step by Step on the development of democratic ideals and practices, we gathered self-report data using two sources. First, we analyzed data from the Teacher Beliefs and Practices Survey (TBPS) by organizing the responses to 33 of the 52 items into four distinct subscales:

Democratic Beliefs, Teacher as Locus of Control, Basic Skills, and Teacher as Active Learner. Statistical tests indicated that these subscales exhibit acceptable levels of reliability. See Appendix I for the psychometric properties of this instrument and its subscales.

A second source of data was the Kindergarten Directors' Questionnaire (KDQ), in which 20 Step by Step kindergarten directors provided extensive information about their current practices and procedures for involving teachers in decision making and for supporting teachers' ongoing professional development. Since most respondents were directing sample kindergartens prior to the adoption of the Step by Step methodology, they were asked to rate and provide anecdotal evidence to support any changes in practices attributable to the introduction of the Step by Step program.¹

Many of these data were consistent with classroom observation findings reported in the previous chapter. Moreover, they provide insights into the nature of teachers' roles, their beliefs about children's development, content and pedagogy, and characteristics of school communities that support the shift from teacher-centered practice to more democratic, child-centered education.

Overall Findings

Beliefs About Democratic Classroom Practices

In order to provide such an open climate for learning, one would expect that teachers orchestrating the learning environment in Step by Step classrooms would hold widely different beliefs from those teachers working in traditional classrooms. As the classroom observation findings suggested, Step by Step teachers behaved far more democratically than their colleagues in traditional kindergartens. Data from the TBPS *Democratic Beliefs* subscale, displayed in Table III.1, confirmed that these differences in behavior are undergirded by a significantly different system of beliefs.

¹ In many cases, research coordinators conducted interviews with respondents to clarify their responses to particular items.

As measured by this subscale, Step by Step teachers appear to share a system of beliefs about child development, children's active learning capacity, and those teaching strategies that optimally promote child development and learning. While there was virtually no difference between the means for Step by Step teachers in initial versus expansion classrooms, 3.53 and 3.47 respectively, on the *Democratic Beliefs* subscale, differences between Step by Step and traditional classrooms were highly significant ($p < .0001$).

One set of items in this subscale focused on teachers' beliefs regarding young children's capacity for active learning. That is, Step by Step teachers shared the conviction that it is an important goal for young children to learn to make choices (*TBPS IV-2*) as well as to pose their own questions (*TBPS IV-4*).² Step by Step teachers believed that children learn new ideas best through play and experimenting with materials (*TBPS III-11*; *TBPS IV-14*). Teachers' beliefs about children's active learning capacity extended into the social domain as well. Step by Step teachers appeared to be stronger in their belief that children's roles should include involvement in establishing classroom rules (*TBPS III-10*), taking responsibility for tasks/jobs in the classroom (*TBPS IV-12*), and developing skills for solving problems—intellectual and social—with other children (*TBPS III-1*; *IV-3*).

² This convention refers to the subsection and item number in the Teacher Beliefs and Practices Survey. It will be used for all of the references to this instrument throughout the rest of this chapter.

Table III.1: Teacher Beliefs and Practices Subscales

Subscales	Step by Step Initial		Step by Step Expansion		Traditional		Signif.
	Mean	SD	Mean	SD	Mean	SD	
<i>Democratic Beliefs</i>	3.53	.21	3.47	.32	3.28	.25	.0001
<i>Teacher as Locus of Control</i>	2.96	.36	2.97	.46	2.95	.29	.969
<i>Basic Skills</i>	2.92	.69	2.70	.57	2.74	.55	.215
<i>Teacher as Active Learner</i>	3.28	.31	3.17	.31	2.94	.26	.0001

Closely linked to teachers' beliefs about children's capacities are their beliefs about pedagogical practices that foster children's development in these areas. Step by Step teachers believed that questioning and modeling are important pedagogical practices that can advance children's critical thinking, promote inquiry, and reveal important information about children's understanding of the world (*TBPS III-3; III-6; III-13*). Practices such as organizing the environment so that children can select from a range of appropriate activities, and conducting class discussions to resolve problems appeared to be an integral part of Step by Step teachers' beliefs.

Beliefs About the Teacher as the Locus of Control

Classroom observation data suggested that Step by Step teachers have a distinctly different view of their role than teachers in traditional programs. To provide opportunities for child choice, initiative, and decision making, teachers must facilitate but not control the learning process, sharing the locus of control for learning with children. Yet, as we examine the *Teacher as Locus of Control* subscale, we saw no significant difference between the beliefs of Step by Step teachers and those of teachers in traditional programs. This subscale consisted of a cluster of eight items which assert a set of beliefs that contrast sharply with those that comprise the *Democratic Beliefs* subscale described above. Beliefs as presented in the *Teacher as Locus of Control* subscale described a more

traditional, teacher-directed learning environment, in which children learn best when teachers provide information, select activities for children, and establish and enforce classroom rules without children's involvement (*TBPS III-5; III-8; III-14; III-20*). Also in these items, responses by teachers indicated that they were less concerned about promoting inquiry than they were with controlling the flow of information and learning (*TBPS III-15; III-17; III-21; IV-11*). Thus, Step by Step teachers reported a belief in children's active learning involvement but, at the same time, also reported a belief in a teacher-directed learning environment.

Why do Step by Step teachers hold two contradictory sets of beliefs about children's active learning capacity and the value of democratic practices? Before hypothesizing about the possible factors at play, it is important to note that the means for Step by Step and traditional teachers on the *Teacher as Locus of Control* subscale were virtually the same (2.96 & 2.97 vs. 2.95) and considerably lower than the mean rating given by Step by Step teachers to items in the *Democratic Beliefs* subscale (3.53 & 3.47 vs. 3.28).³

One factor that can help explain the lack of difference on this subscale between Step by Step and traditional teachers is the problem inherent in data that is self-reported. One would expect that knowledge about some of the key components of the Step by Step model has spread throughout early childhood education circles, especially in communities where Step by Step is well established. It is, therefore, conceivable that teachers in traditional kindergartens were able to detect that the assertions that comprised the *Teacher as Locus of Control* subscale were less desirable beliefs, given what they have learned about the methodology. As a result, they may have assigned these items a lower rating on average than they would have otherwise.

Besides the limitations of self-report data, there is another way in which to interpret Step by Step teachers' simultaneously holding onto two apparently contradictory belief systems. If we return to the ECCO results presented in

³ In this chapter means are presented in parentheses after discussed in text in the following order: Step by Step initial, expansion, and traditional.

Chapter II, it is clear that, in practice, Step by Step teachers were actually sharing the locus of control with children. Children in Step by Step classrooms chose their own activities, were encouraged to ask questions, had access to materials, and were encouraged to resolve their own conflicts. So, it appears that the strength of Step by Step teachers' beliefs may in fact *follow* the establishment of their practice, rather than act as antecedents.

One must consider that the Step by Step program is only four years old and has, on balance, made considerable strides in helping teachers learn and implement new practices in a short period of time. No matter how motivated these teachers are to grow and change, they are engaged in altering a lifelong orientation toward teaching and learning which has been ingrained by their teacher training as well as their own school experiences. As Goodlad reported in his seminal work on teacher education, the most powerful factors shaping the way teachers teach are their own school experiences and their practicum experiences.⁴ The fact that Step by Step teachers may not yet have belief systems that are in complete harmony with their practices underscores the importance of continued reinforcement and refinement of the Step by Step methodology. It suggests the need to build strong systems of in-service training and supportive supervision. It also vividly illustrates why the focus on preservice teacher education is such a vital element in the Step by Step implementation strategy.

Beliefs and Basic Skills

As measured by the *Basic Skills* subscale, Step by Step teachers did not differ from teachers in traditional settings with respect to their academic goals for children. Table III.1 shows that the means for each group (2.92 & 2.70 vs. 2.74) were not significantly different. This subscale consisted of five items that gathered data about teachers' beliefs about what basic skills children should acquire in kindergarten (e.g., mathematics and literacy). The fact that teachers across both settings had similar academic goals is not surprising given the value placed on

⁴ Goodlad, J.I. (1990). *Teachers for Our Nation's Schools*. San Francisco: Jossey-Bass.

content knowledge in these countries. How these beliefs affect children's learning is examined in more detail in Chapter IV.

Professional Learning Communities

The nature of the wider school climate is a critical factor in supporting teachers' ability to establish and sustain democratic, child-centered classroom practices. An attribute of such schools is a system of policies and practices that creates a *professional learning community* which supports teachers as decision makers and as learners. A democratic school opens up the decision-making process so that teachers have a voice in defining practices that govern teaching and learning and the operation of the school in general. As we have examined data from the KDQ, we have seen strong indications that decision-making practices have changed as a result of the adoption of the Step by Step methodology. The survey data indicated that the climate is more open, inviting more substantive participation on the part of teachers and families. The following quotation from a director in Romania characterized the overall change in the tone of one kindergarten and is representative of many of the comments made by directors across all four countries:

Before Step by Step, discussions were formal and there was no consideration of suggestions coming from the staff with respect to the decision making process. Before, materials and toys for children were not available to them. Now they are displayed so that everyone can use them whenever they want to. Before, children's work (drawings, collages, etc.) were displayed only for kindergarten teachers. Now they are displayed for children and parents too. Before, parents were not allowed to come in the classroom; they had to leave their children in the entrance hall and did not see what their children were doing. Now the kindergarten promotes a permanent open-door policy. The parents participate in different classroom activities, their trust in the program has increased, and they have the opportunity to know their children better.

In order to assess the effect that Step by Step had on school climate, we asked directors of Step by Step kindergartens in all four countries to rate their policies and practices prior to and following implementation of Step by Step, using a four-

point scale that indicated the frequency of the practice. All of the eight items rated suggest that directors implemented different, more democratic practices after the Step by Step methodology was adopted by their kindergartens. The dimension that showed the most noteworthy change was teachers' involvement in making decisions about child assessment criteria. Eighty percent, or 16 of the 20 directors, rated that their new practices increased teacher involvement by at least two scale points. It is important to note that an increase of two scale points was fully half of the range of scale. This is particularly important since the use of observation and other teacher-driven approaches to child assessment is a new practice in most of the newly independent states, and was explicitly introduced as a key feature of the Step by Step model.

Closely related is the practice of involving teachers in decisions about the teaching methods and materials that they use. Data indicated that in the majority of cases, Step by Step teachers were given more decision-making power regarding their teaching methods in the classroom, more input into the policies of the kindergarten, and more voice in selecting workshop topics since the adoption of Step by Step.

Another notable change in practice reported by directors was in the focus and climate of staff meetings. One director in Bulgaria explained the change by recalling how restrictive the climate in her kindergarten used to be. "Before we started working in the [Step by Step] program, each of us felt uneasy and seldom expressed his/her opinion. And, the opinion we always expressed was consistent with the one who desired it, especially if he/she was the boss."

In addition to the KDQ's data on program structures, the TBPS also provided some information on the nature of the professional learning community. The *Teacher as Learner* subscale was especially useful, since it gathered data on how much teachers value ongoing professional development as well as their perceptions of program practices that support their ability to learn on the job. Data from this subscale revealed that Step by Step teachers believe that they must constantly learn new methods to be effective and that preservice education

represents only the beginning of the professional learning cycle (*TBPS III-4; III-9*). They also reported that as staff in Step by Step kindergartens, they have many opportunities to learn from colleagues, including their supervisors, other teachers, and workshops that consistently expose them to new and relevant ideas (*TBPS III-2; III-7; III-12; III-16; III-19; III-22*). Even though aggregate data indicated that Step by Step teachers have significantly higher means on this subscale than teachers in traditional settings (3.28 & 3.17 vs. 2.94), it is important to note that this finding is driven by results in two countries. Step by Step teachers in Bulgaria and Romania were dramatically different from their counterparts in traditional programs, with huge effects sizes (Bulgaria: Cohen's $d = 1.85$; Romania: Cohen's $d = 2.81$). By contrast, in Ukraine and Kyrgyzstan there were no statistically significant differences between Step by Step and traditional teachers on this subscale. Because this subscale had the weakest psychometric properties of all TBPS subscales, this result should be treated with caution. It should, however, be noted that Bulgaria and Romania's program implementation data indicated teamwork as an important priority for ongoing teacher training. This emphasis could have influenced the *Teacher as Active Learner* subscale scores, since teamwork is related to learning from colleagues, a significant dimension of this subscale.

Summary

Both kindergarten directors and teachers confirm that the Step by Step methodology has considerably altered the wider school community. A more open climate now characterizes the program in general and staff meetings in particular. One of the most striking changes involves a shift in teachers' role as decision makers. Teachers in Step by Step programs now determine what classroom methods and materials to use, while also having a voice in shaping kindergarten policies. Step by Step teachers make more decisions about methods, materials, and even kindergarten policies. Moreover, program structures reinforce teachers' role as learners. Such opportunities for participation in decision making and professional growth are indicators that Step by Step kindergartens are promoting

democratic values beyond the classroom walls. A kindergarten director in Kyrgyzstan sums up the change by saying:

Before adopting the Step by Step program, there was an authoritarian style of teaching and education. Children had to do all that their teacher said or ordered. Now teachers individualize so children can choose activities they wish. Children feel free in discussing/interacting with each other. They can easily interact with adults. They choose their own games and activities if they wish.

The ways in which Step by Step teachers differ from teachers in traditional programs with respect to their specific beliefs about child development and optimal pedagogical practices is less clear and more complex than we would expect, given the ECCO data discussed in Chapter II. Our data from one TBPS subscale suggested dramatic differences between Step by Step teachers and their counterparts in traditional programs. Step by Step teachers share a system of beliefs aligned with the child-centered philosophy that guides the Step by Step methodology and is completely compatible with their actual practices in their classrooms. However, at the same time, Step by Step teachers appeared to hold a contradictory set of beliefs that are characteristic of a more traditional, teacher-directed philosophy and approach. Like their peers in traditional programs, they retain beliefs that place the locus of control in classrooms primarily with teachers. One possible interpretation of these contradictory beliefs is methodological. A second interpretation is that while Step by Step teachers actually share control with children in the classroom, their beliefs lag behind. This notion of practice as antecedent to belief is not uncommon in developmental psychology.

FAMILY INVOLVEMENT

Parent involvement in their children's early education is a hallmark of high-quality early childhood programs. Because of its many benefits, it is also a major goal of Step by Step. Kindergartens benefit when family volunteers provide direct assistance. Parents gain understanding of participatory democratic practices as they assist in classrooms and engage in governance activities. Furthermore,

families learn the skills they need to support their children's acquisition of the skills needed to function in a changing world.

Three different data sources provided us insight into parent involvement practices. The KDQ reported the entire kindergarten's parent involvement efforts. The TBPS provided parent involvement information from kindergarten teachers, and the ECCO provided observational data about patterns of parental involvement in classrooms. The data gathered with these instruments reveal that parent involvement occurs primarily through participation in governance, and that openness to parents and encouragement of interaction is communicated in varied ways.

The next section deals with broad features of kindergartens that set the tone of kindergarten-parent relationships. We then discuss the specific forms of parent involvement as a means to understand the roles parents play in these programs. Finally, we discuss distinctive patterns seen in parents' involvement in governance.

Overall Tone of Kindergarten-Parent Relationships

Democratic practices do not thrive unless they are embedded in a social context of openness in which information is shared and communication flows easily, and which offers opportunities for all to have a voice in decision making. When these principles are viewed in the context of early childhood education settings, we see that practices that invite parents into programs and furnish venues for sharing information are critical to establishing a democratic community. Thus, to create such a community, parents need access to classrooms so that they can see what their children are experiencing and to be able to converse with teachers about children's learning. In addition, parents need to be invited to express opinions and contribute to decisions that influence the operation of the kindergarten.

Step by Step programs regard involvement of parents as important yet challenging. When the program was first introduced, country teams and kindergarten staff identified many obstacles to involving parents. The Step by

Step family involvement component represented a significant departure from the standard procedure in all four countries. For example, many countries restricted parents from certain spaces in kindergartens (e.g., classrooms, sleeping rooms). Moreover, including parents in the educational process required a major paradigm shift regarding teachers' roles and the nature of education. Despite these obstacles, Step by Step teachers have learned how to be open to parents.

Welcoming Attitude and Open Communications

Step by Step programs revealed their openness to parents in several concrete ways. A clear-cut expression of this openness is the provision of rooms designated for parent use. In every Step by Step kindergarten, such rooms were available; no such space existed in traditional programs. Moreover, a welcoming attitude was reflected in other practices that were designed to invite parents' engagement on a number of levels. Some of the most noteworthy findings in this arena are:

- Every Step by Step kindergarten director in the sample reported having "Open Door Days," which are equivalent to an open house in the U.S., when parents and other family members are encouraged to visit the kindergarten (KDQ III-37b). In traditional programs, parents rarely volunteered in their children's classrooms and almost never scheduled opportunities to visit.
- Every Step by Step kindergarten director reported holding regular meetings with parents (KDQ III-37c), and teachers reported having regular conferences (between quarterly and monthly), significantly more often than in traditional settings (TPBS II-e).
- Reports are regularly sent to parents (two or more times a month in two countries; between two and six times in the other two countries)—a rate only slightly higher than that seen in traditional kindergartens (TBPS II-f).
- Children's work was sent home regularly, with this being a somewhat more common practice among Step by Step than traditional kindergartens (ECCO J1-3).
- Step by Step kindergartens often staged (between quarterly and monthly) student performances for parents at a rate that was 50 percent more frequent than in traditional kindergartens (TBPS II-d).
- Every Step by Step kindergarten director reported that teachers make home visits (KDQ III-37d).

Clearly, Step by Step programs have encouraged parents to engage in their children's education in ways never seen in traditional kindergartens. Parents have a place to meet and staff make themselves available for conversations, seeking to establish positive relationships with parents.

Assisting in Classrooms

A distinguishing characteristic of programs with effective family involvement is the presence of parents in classrooms. By spending time in classrooms, parents are able to observe how teachers interact with children, gaining deep insight into how the kindergarten works, while learning new ways of supporting children's development. Of course, when used effectively, parents can make important contributions to the life of the classroom, providing children new activities and serving as another adult conversational partner for children.

The ECCO data provided clear evidence that parents were present far more often in Step by Step classrooms than in traditional settings. The more precise and striking evidence we have on this matter came from the direct observations of data collectors. *Family participates in classroom activities (J1-5)* was an indicator that was rated as accurately describing 90 percent of the Step by Step classrooms, but only 20 percent of the traditional classrooms. Similarly dramatic differences appeared in responses to the TBPS. Step by Step teachers in initial classrooms indicated parents were present in the classroom two to three times a month, and those in expansion classrooms responded that parents were present between one and three times a month. In sharp contrast, teachers in traditional kindergartens reported that parents either had never been in the room or had been in the classroom only once or twice a year. These are especially dramatic differences given the self-report nature of this tool. The magnitude of this finding clearly reflects the fundamental philosophical difference between the Step by Step and traditional approaches to parents.

When Step by Step kindergarten directors were asked to estimate the percentage of families that participate in the classroom, the average level they reported was

an impressive 68.5 percent (see Table III.2). It is noteworthy that roughly the same levels were reported for all countries and that the degree of within-in country variability was limited. Thus, in all kindergartens across all countries it seems that many parents had opportunities to spend time in their children's classrooms. Consistent with these self-reported levels of parental engagement, classroom observers rated Step by Step programs as strong in efforts they made to promote parent participation (J-1: 2.85; 2.73) while rating traditional programs as much less likely to encourage parent participation (1.48).

A glimpse of the power of family contributions to the life of classrooms and of personal rewards that come from this type of involvement was made especially evident by the following example provided by a director of a kindergarten in Romania:

By being involved in the program activities, parents feel productive, needed, relaxed, and they became more confident in themselves and their children. A good example in this respect is a child's grandmother that became the grandmother of all the children.

Assisting With Tasks That Benefit the Entire Kindergarten

Members who are fully invested in a democratic community feel a sense of obligation to contribute to its welfare and, in turn, gain the satisfaction that comes from being part of such a community. In Step by Step programs, there were various activities that benefited the entire community. Data from the KDQ (see Table III.2) revealed a broad range of ways in which parents supported the kindergarten. Directors estimated that significant percentages of parents were involved in activities that benefited the entire program (Table III.2). Construction-related activities were popular, as a significant number of parents constructed outdoor equipment (22 percent) and furniture or materials (31 percent), while over half assisted with kindergarten maintenance (58 percent). * Roughly similar percentages of parents assisted with administrative activities such as organizing

* These figures indicate the mean percentage for those kindergartens that report these categories of parent participation.

functions (42 percent), doing clerical work (22 percent), and working on fundraising (33 percent). Finally, many parents supported the program through donations of cash (52 percent), classroom equipment (44 percent), and building supplies (29 percent). Thus, when we look at Step by Step programs as a group, we see that large numbers of parents were involved in a wide range of activities. A Bulgarian director attributes better conditions to the many efforts of family members:

Families have made many contributions, such as the repair and maintenance of the facility, donating furnishings for the kindergarten, providing materials and technical equipment. All of these contribute to making a rich environment for the education and teaching of children. They also produce better working conditions for the pedagogues.

Yet reported patterns of parent involvement showed interesting variability from one country to the next. Ukraine showed a consistent pattern of high levels of parent involvement, with percentages of participation that are far above the mean in several categories, and only below the mean in fundraising. Areas of special strength were in donation of supplies and materials, event organization, repair and maintenance—an activity that seems to involve nearly all the parents.

Kyrgyzstan also showed a strong pattern relative to the mean, with noteworthy strengths in cash contributions and facilities repair. Unlike in Ukraine, however, there was considerable within-country variability in reported percentages of parent participation in Kyrgyzstan. In 8 of the 10 types of participation, the range between the highest and lowest reported percentage exceeded 50 percent. This result could reflect interesting within-country variation in local conditions and in efforts to involve parents, and deserves further study. It is likely that the data reflect important differences in local circumstances (e.g., legal strictures, poverty levels, historical factors) as well as variation in how kindergarten directors attempt to engage parents. By better understanding the sources of this variability, program directors will be in a stronger position to suggest practices that effectively draw parents into efforts that support the kindergarten.

**Table III.2: Patterns of Overall Family Involvement
in Kindergarten Activities**

	Bulgaria		Kyrgyzstan		Romania		Ukraine		Total	
	# Yes n = 5	% parents ⁵	# Yes n = 5	% parent s	# Yes n = 5	% parent s	# Yes n = 5	% parent s	% Yes n = 20	% parent s
Participate in the classroom	5	68	5	66*	5	67	5	73	100	68
Organize events	3	12	5	31*	5	25	5	88	90	42
Build outdoor equipment	5	12	5	28*	4	11	5	35	95	22
Make furniture & materials	5	37* ⁶	5	41*	5	11	5	36	100	31
Do clerical work	4	34	4	10	5	11	5	32	95	22
Repair and maintain facility	5	34*	5	84*	4	8	5	96	95	58
Help raise funds	4	54*	4	11	4	39	2	25	65	33
Contribute cash	4	21	5	88*	5	29	5	64	95	52
Donate classroom supplies	4	25	5	49*	3	14	5	73	85	44
Donate building supplies	3	7	5	33*	4	6	5	56*	85	29

Acquiring Knowledge and Skills of Personal Benefit

As parents strive to raise their children in a world that is changing rapidly, kindergartens have the opportunity to help them acquire approaches to child rearing more consistent with the emerging social environment. Such advice is communicated through workshops for parents that, according to responses to the TBPS (TBPS II-g), are conducted in traditional and Step by Step kindergartens somewhat less than once a month (3.46 & 3.54 vs. 3.84). Interestingly, teachers in traditional classrooms rated this activity as occurring somewhat more often than did Step by Step teachers. While traditional programs may hold somewhat more structured workshops, Step by Step programs were far more likely to support

⁵ Percentage of parents in those kindergartens responding that this does occur. All figures are rounded to the nearest whole number.

⁶ All figures with an asterisk had a large degree of variation from one kindergarten to the next (i.e., ranges of 50 percent or more within the country).

parent's child-rearing efforts by making information available to parents (*ECCOJ I-1*: 97% & 100% vs. 47%) and by making materials available to parents (*ECCO JI-2*: 93% & 83% vs. 27%). Of course, as noted earlier, as the large number of parents in Step by Step programs spend time in classrooms, they also have opportunities to learn new approaches to child rearing.

Parent Associations and Governance

One important mark of a learning community infused with democratic practices is the elevated role of parents in the governance of the school. As we have seen, there is almost universal participation of parents in Step by Step classrooms. Now we turn to the data that show that parents are organized into associations in each of the kindergartens sampled (see Table III.3). Through these associations, parents contribute to the kindergarten beyond their own child's classroom experience. Although parent associations are an integral part of school life in the United States, in these four countries this type of parent participation is far from traditional.

Parent associations existed in 100 percent of the Step by Step kindergartens sampled; in two of these kindergartens, there were two parent associations. In these instances it appears that one association functioned as a general membership group and the second operated more as a board of directors.

**Table III.3: Step by Step
Kindergartens With Parent Associations**

Country	1 Association	2 Associations
Bulgaria	4	1
Kyrgyzstan	5	0
Romania	4	1
Ukraine	5	0

Parent associations contributed to the life of the Step by Step kindergartens in important ways. Most of them contributed substantively to the governance of the kindergarten, working with the administration in strategic ways. In 59 percent of the kindergartens, parent associations offered advice to the administration; in half of them they wielded decision-making authority; and in approximately one-third, they helped establish kindergarten policies (see Table III.4). Parent associations advertised the Step by Step program and sponsored activities such as parents' conferences. It is notable that the parent associations sometimes also provided support for social services outside their own kindergarten. For example, they offered resources to low-income families (Romania and Kyrgyzstan), and one parent association participated in activities in defense of children's rights (Ukraine).

Table III.4: Functions of Parent Associations

Function	Frequency of Occurrence
Offer advice	13 (59%)
Have decision-making power	11 (50%)
Establish policies	7 (32%)

Parent associations varied in size, though many (43 percent) had 10 or fewer members. The median number of parents involved in each parent association was 12, with a range from 4 to 75. (One association, with a large group size of 200, is unusual and is explained below.) Thus, the typical size of parent associations was small enough to allow parents to get to know each other and to have a voice during meetings.

Almost all of the associations met at least once a month during the school year. However, the frequency of meetings was slightly different in the Tulcea kindergarten in Romania. In this kindergarten, the parent association met only twice during the school year. One of its important functions was to provide funding for several supplementary teachers for the kindergarten. This parent

association was comprised of the entire parent population (200) and appeared to collect “dues” to support supplementary staff persons, including ESL teachers, teacher assistants, and a piano teacher. In this respect, the Tulcea Association functioned somewhat differently than the others. Its structure appears to be similar to those of many schools in the U.S., in which parents pay annual dues (and receive, perhaps, a newsletter or a phone directory) but in which active participation by the large group is not required or expected.

The parent association in Sofia, Bulgaria presented another, slightly different picture. While in most kindergartens, the functions and composition of the parent group seemed to overlap, in Sofia, there were two distinct parent associations. One of them had five members that met only once a school year. This group concentrated its efforts on providing advice and had decision-making authority. The larger, second group (42 parents) met more than once a month and worked on advertising the program, although it also gave advice and has decision-making authority.

Another sign of democratic schools was the manner in which the members of the association are elected. We have found that in all 20 of the Step by Step kindergartens sampled, the members of the parent associations were, indeed, elected and not simply appointed. Parents participated in elections in all the kindergartens and, in a few cases, the teachers and coordinators also voted in these elections. In some instances, candidates nominated themselves for election; in other cases, they were nominated by other parents or even teachers. Thus, in all four countries, there were parent groups that seemed to be functioning in ways that provided parents opportunities to participate in a democratic community. Structural features of the programs that we examined—group size, meeting frequency—suggested that the groups were viable. Our data indicate that in many cases, access to groups was open, but it is beyond the scope of this study to examine the extent to which all parents feel able to participate in these associations.

Parental Role in Kindergarten Evaluation

A clear mark of a democratic organization is measurement of its own success by the degree to which it reflects the needs and desires of its constituency. This is often achieved through some type of systematic evaluation. In the Step by Step program, evaluation of the kindergartens by parents was an almost universal practice.

Table III.5: Areas of Parent Evaluation

Areas	# of Kindergartens
Their child's experience	17 (85%)
Parent education activities	17 (85%)
Communication of program goals	15 (75%)
Openness to parent participation	17 (85%)
Requests for suggestions	17 (85%)

Nineteen out of the twenty kindergartens sampled reported using parent evaluation to identify the strengths and weaknesses of their programs. Of those, 15 (79 percent) were anonymous evaluations and only 4 were not. As Table III.5 indicates, almost all the kindergartens ask parents to evaluate the level of satisfaction with children's experience (85 percent), parent education activities (85 percent), and efforts to communicate the goals of the program to parents (75 percent). They also solicited parents' suggestions (85 percent). A slightly smaller proportion asked about the level of satisfaction with efforts to communicate the goals of the program (75 percent). While we were unable to determine the extent to which parents' suggestions were taken into account in making program improvements, programs clearly have the data to do so.

Summary

Step by Step programs have been very successful in their efforts to involve families in all aspects of their kindergartens. As a result, parents have the experience of being part of open, more democratic environments in Step by Step kindergartens. Based on the reports of the kindergarten directors, the openness parents experience and the opportunities they are given to become involved in their children's schooling are having a transformative effect on them. This perception was expressed well by a kindergarten director in Ukraine:

Before the adoption of the program, parents' participation was minimal, passive, without any initiative. At the present moment, parents are active assistants of the educators, and take active part in the teaching and educating process. As a result of this cooperation, the conditions have formed in which children, parents, and educators feel themselves as one family (compatibility, mutual understanding, mutual respect). The authority of some educators has grown; the parents are independently involved in the work process, and they become educators' assistants.

In addition, Step by Step programs have gone beyond participation to governance. It is remarkable that parent associations existed in 100 percent of the Step by Step kindergartens in the sample. Leaders in these parent associations were elected by other parents, confirming that democratic practices have taken hold. Moreover, half of these associations wielded decision-making authority in the kindergarten; one-third influenced policy. Considering that Step by Step has been operating for only four years and has introduced the concept of family involvement to these countries, these results represent a noteworthy achievement.

CHAPTER IV: IMPACT ON CHILDREN'S LEARNING

In previous chapters, we examined the extent to which the Step by Step program has introduced democratic practices to children, teachers, and parents. While introduction of such practices is of prime importance to the Step by Step program and its sponsors, the progress of individual children in core academic areas ultimately will determine whether or not local decision makers and parents continue to support this approach to education. Step by Step recognizes this challenge and has responded by developing a pedagogical approach designed to teach children literacy and numeracy competencies along with other core knowledge valued by each country, in the context of classrooms that foster development of creativity, responsibility, and problem-solving skills.¹

The individual child assessment part of this evaluation addressed the following research question:

Are the educational performance and developmental progress of Step by Step children comparable to those of children in traditional programs?

The assessment tools used were chosen to address the most salient indicators of child progress in the core academic areas of literacy, numeracy, and language development. In addition, we used a tool that is widely employed to assess creative thinking, because one of the special features of Step by Step is its effort to nurture children's creative development. The characteristics of each instrument and their psychometric properties are discussed in more detail in Appendix I.

All of our child assessments were built on two core assumptions: 1) our tasks elicited performances that reveal information central to understanding a child's developmental level in the domain being assessed, and 2) our tasks allowed us to

¹ In our on-site visits to Step by Step programs we found that topics related to the history, culture, and artistic and musical traditions of the country are also an important feature of Step by Step kindergartens. It was evident that to some degree, a major criterion guiding selection of this material was a desire to expose children to knowledge common to all children in the country. It is well beyond the scope of this study to assess children's mastery of this country- and culture-specific knowledge.

chart the developmental trajectory of children as they acquire skill in a given domain. That is, we expected that older children would do better than younger children; therefore performance differences would reveal developmental differences in a domain. We also assumed that highly effective programs would move children through these developmental progressions more quickly than less effective programs. Given these assumptions, it was essential that we take age into account when comparing children from different programs. One way to control for age is to ensure that all children are the same age. Unfortunately, the samples drawn from Step by Step and traditional programs were not consistently matched in age. We therefore used statistical methods to adjust for age in our means. As a result, all mean scores and all analyses comparing children in Step by Step to those in traditional programs take into account the effect of age differences among children in the sample for a given country.

In this chapter we make within-country comparisons, but no cross-country comparisons. We have taken this approach because the issue of interest is whether children in Step by Step programs are achieving at levels consistent with those typically seen in a given country. The success of Step by Step must be viewed in terms of its ability to use the resources and organizational systems of a given country to educate. Even if one wanted to compare across countries, there would be no psychometric basis for making cross-country comparisons using the tests we employed. Therefore, while the display of results may appear to invite comparisons among countries, it is not valid to do so.

In previous chapters where the classroom was the unit of analysis, we presented data from Step by Step initial and expansion classrooms as well as from traditional settings. In this chapter, where we present the child assessment component of the evaluation, we drew our sample of Step by Step children only from initial classrooms. Consequently, we present findings only from children in Step by Step initial classrooms and the comparison group in traditional classrooms.

NUMERACY

The Test of Early Mathematical Ability, Second Edition (TEMA-2), was used to evaluate both formal and informal mathematical knowledge. The informal skills measured include relative magnitude, counting, and calculation skills. These are the kinds of skills that children can acquire as they play with materials, participate in games, and engage in casual conversations with adults about their activity. They might acquire such knowledge at home or during the course of informal kindergarten activities and conversations. The formal abilities measured include knowledge of convention, number facts, calculation skills, and base ten concepts. Children are more likely to acquire these capacities through direct instruction; thus they are more likely to acquire them in school. In the test, more informal items appeared earlier, and formal items later. However, even five- and six-year-old children encountered some of both kinds of items.

Because the score a child receives reflects performance on a composite set of items, it is difficult to interpret raw scores. In the U.S. raw scores are given meaning by relating them to age norms. No such norms exist for the countries included in this study, but it is reasonable to expect that children in other countries acquire the mathematical understandings tapped by the TEMA-2 in roughly the same order as U.S. children. Because we use age-adjusted means and lack country-specific norms, one cannot use these U.S. mean scores to draw conclusions about the rate of acquisition of mathematical knowledge in other countries. They do, however, provide a starting point for considering cross-national developmental pathways in mathematics learning. Therefore, Table IV.1 displays patterns of performance reflected by different total scores. These allow the reader to attach some meaning to the raw scores. The points along the continuum describing score profiles correspond to the score achieved by an average U.S. child between the ages of four and eight. It should be noted that the linkage between these average profiles and any given child's actual performance is only approximate, because children will vary in the items they pass and those they miss as they approach a ceiling. Nonetheless, this chart provides some guidance regarding overall patterns of development.

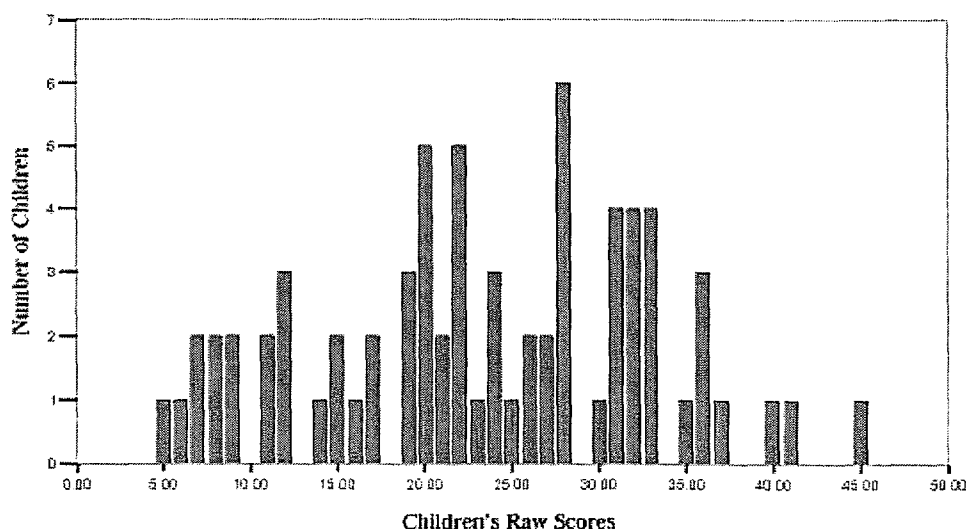
Table IV.1: TEMA-2 Profiles

Score	Performance Profile
13 U.S.: 4 year old performance	<u>Informal</u> <i>Counting.</i> Counts up to 10 objects; enumerates up to 5 objects <u>Formal</u> <i>Conventions.</i> Reads single-digit numerals
23 U.S.: 5 year old performance	<u>Informal</u> <i>Counting.</i> Forward in the 20's and 30's; backwards from 10 to 1; enumerates 9 and 10 dots on a card <i>Calculation.</i> Up to $2 + 5$ pennies being combined in a hand <i>Relative magnitude.</i> Single-digit proximity on a number line (e.g., 5: closer to 1 or 7?; 3: closer to 1 or 6?)
31 U.S.: 6 year old performance	<u>Informal</u> <i>Counting.</i> Forward to 42; by 10's until 90 <i>Relative magnitude.</i> Double-digit proximity on a number line (e.g., 32: closer to 24 or 61?) <u>Formal</u> <i>Conventions.</i> Writes numbers in the teens; reads double-digit numbers
39 U.S.: 7 year old performance	<u>Informal</u> <i>Counting.</i> Backwards starting at 20; by tens up to 160 <u>Formal</u> <i>Number facts.</i> Rapid recall of facts ($2 + 2$; $3 + 4$; $6 + 3$) <i>Conventions.</i> Writes three-digit numerals
46 U.S.: 8 year old performance	<u>Informal</u> <i>Counting.</i> Continues sequences over 100 started by examiner (e.g., "161, 162, ...") <u>Formal</u> <i>Number facts.</i> Addition facts ($8 + 8$, $7 + 7$); subtraction ($8 - 4$, $12 - 6$) <i>Base Ten.</i> Number of \$10 bills in \$100? \$100 bills in \$1000? (local currency was used) <i>Conventions.</i> Writes three-digit numerals <i>Calculation.</i> Adding without carrying ($23 + 15$, $64 + 32$)

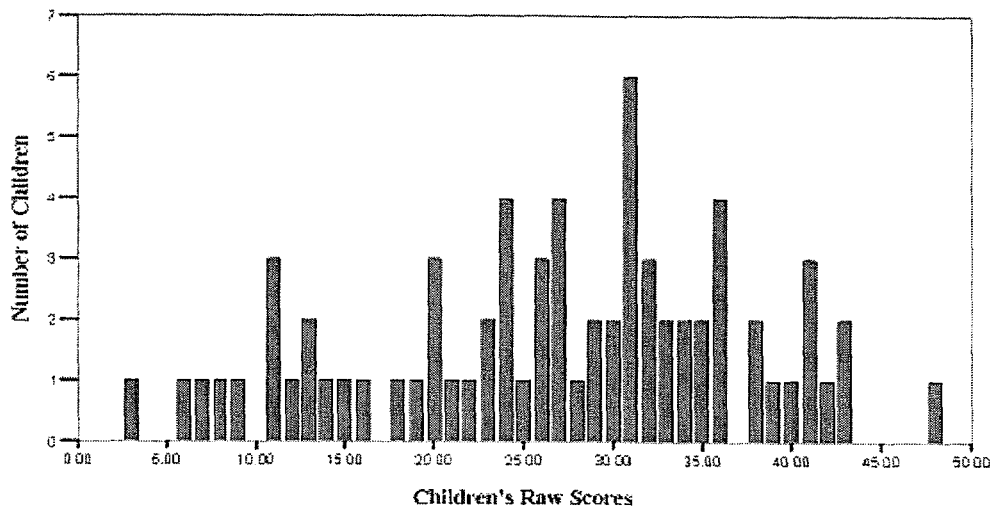
Bulgaria

In Bulgaria there were no significant differences between the performance levels of children in the Step by Step program (Mean = 25.9, SD = 9.5) and children in traditional programs (Mean = 28.01, SD = 10.42). These overall mean scores indicated that children are performing at similar levels and acquiring skills such as counting in the twenties, enumerating 10 objects, and using a number line to determine the relative proximity of a single-digit numeral (e.g., 5) to two others (e.g., 1, 7). While differences between the two types of kindergartens were not statistically significant, inspection of graphs depicting the frequency data (see Figures IV.1a and IV.1b), revealed a somewhat greater incidence of scores at the lower end of the continuum among children from Step by Step classrooms. Of all children assessed in Step by Step classrooms, 45 percent scored 22 points or less; whereas 30 percent of the children from traditional programs received such scores.

**Figure IV.1a: TEMA-2
Bulgaria: Step by Step (n=70)**



**Figure IV.1b: TEMA-2
Bulgaria: Traditional (n=70)**



Kyrgyzstan

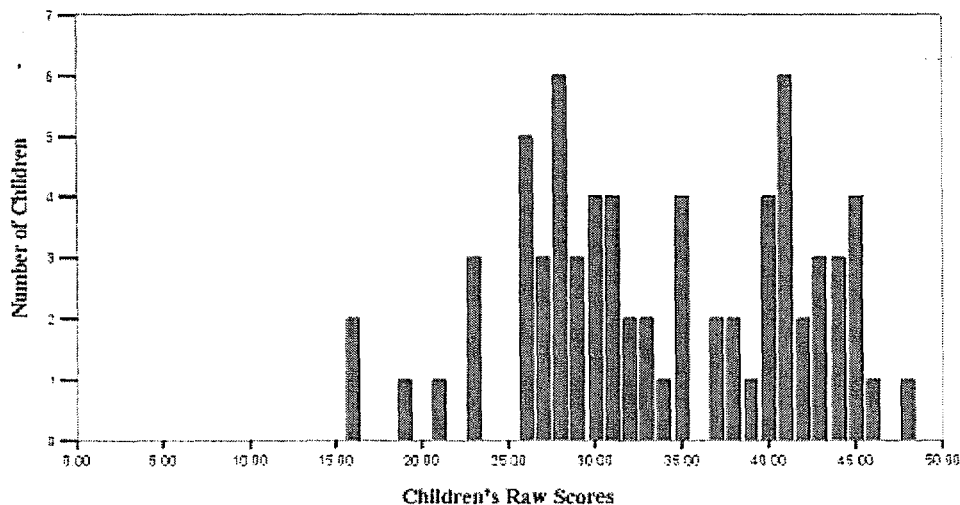
In Kyrgyzstan, the mathematical achievement of children in Step by Step programs (Mean = 32.30, SD = 7.88) was significantly higher ($p < .001$) than that of children in traditional kindergartens (Mean = 26; SD = 8.67). The size of these differences was dramatic, as indicated by the very large effect size of .761. An effect size of this magnitude is very rare in educational research and indicates that the difference observed is not only statistically significant, but is of considerable educational importance. Another way to consider these differences is in developmental terms. In the United States the point differential observed between the two programs (8.3 points) is roughly equal to the point difference seen between children of two different ages (7.9 points between five and six, 8.2 points between six and seven).

If we examine Table IV.1, we can get a qualitative sense of the performance levels of children in these two types of kindergartens. Children in Step by Step programs could count into the forties and by tens and demonstrate varying skills with

double-digit numbers—reading and writing, determining their relative magnitude—while, in general, children in traditional programs demonstrated skills with single-digit numbers and could count in the twenties.

Figures IV.2a and IV.2b provide yet another way to understand the differences between children in these two programs. Far more children in traditional kindergartens received very low scores, with 23 percent of the sample receiving scores of 15 and below; no child in Step by Step received such a score. Similarly dramatic differences were apparent at the high end of the continuum, with 34 percent of the children in Step by Step receiving scores of 40 and above, compared with only 4 percent of the children in traditional kindergartens. In essence the Step by Step program appears to have resulted in considerable gains across the entire developmental spectrum, boosting achievement of children at the lower end and raising that of more able children.

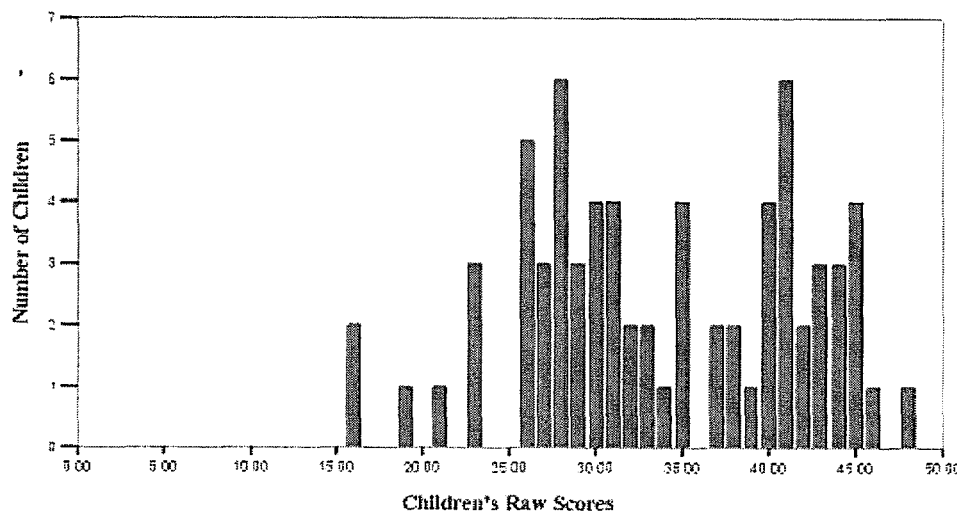
**Figure IV.2a: TEMA-2
Kyrgyzstan: Step by Step (n=70)**



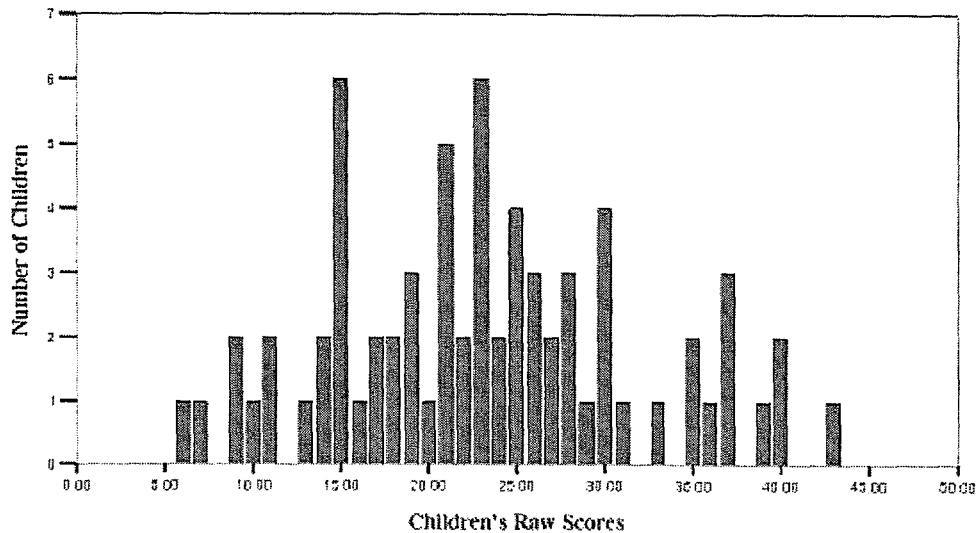
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**Figure IV.2a: TEMA-2
Kyrgyzstan: Step by Step (n=70)**



**Figure IV.2b: TEMA-2
Kyrgyzstan: Traditional (n=69)**



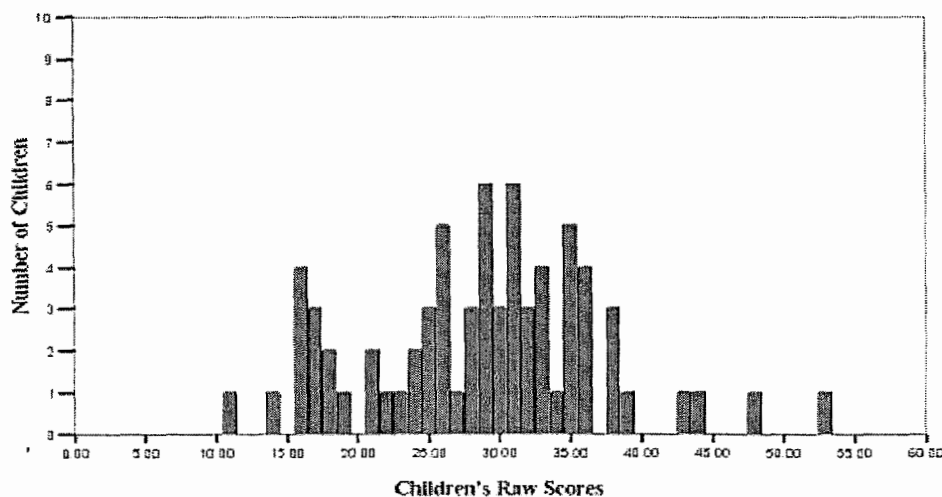
Romania

In Romania the performance of children in Step by Step programs (Mean = 28.18, SD = 8.15) was significantly stronger ($p < .05$) than that of children in traditional kindergartens (Mean = 25.63, SD = 7.13). The effect size of .334 indicated moderate differences that are large enough to be of educational importance. As indicated in the figure describing performance levels, we see that children in both types of programs are gaining skill counting in the twenties. In addition, children in both types of programs are beginning to know simple addition facts and have a sense of the relative magnitude of single-digit numbers. More advanced children are gaining skill reading and writing numerals.

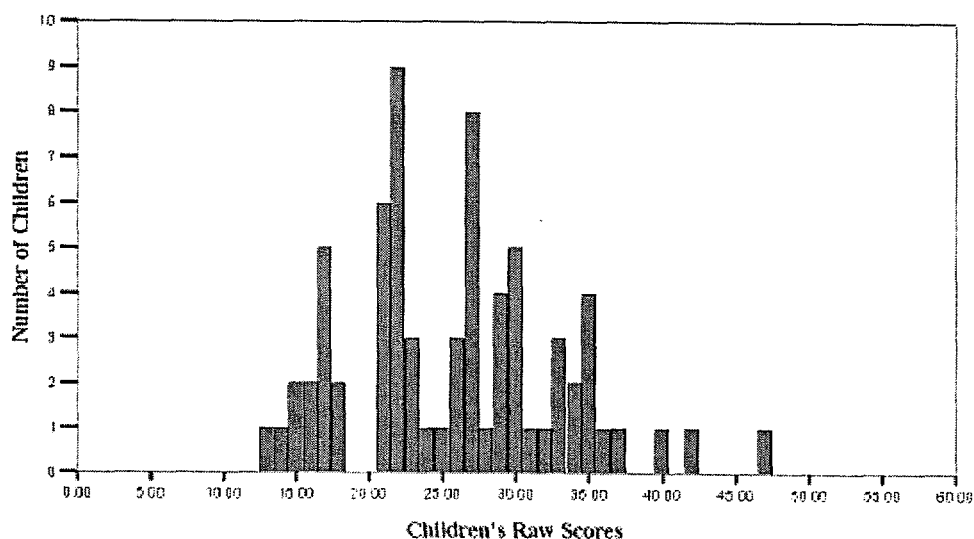
Graphs of scores presented in Figures IV.3a and IV.3b reveal interesting differences at both ends of the developmental continuum. Scores of 23 or less were received by 44 percent of the children from traditional programs but by only 23 percent of the Step by Step children. Conversely, scores of 35 and higher were

received by 24 percent of children from Step by Step programs and only 13 percent of the children from traditional programs. Thus, in comparison to the traditional kindergartens, the Step by Step program appears to be somewhat more successful in raising the performance of children with less advanced understanding of mathematics while also supporting growth of more advanced students.

**Figure IV.3a: TEMA-2
Romania: Step by Step (n=70)**



**Figure IV.3b: TEMA-2
Romania: Traditional (n=70)**



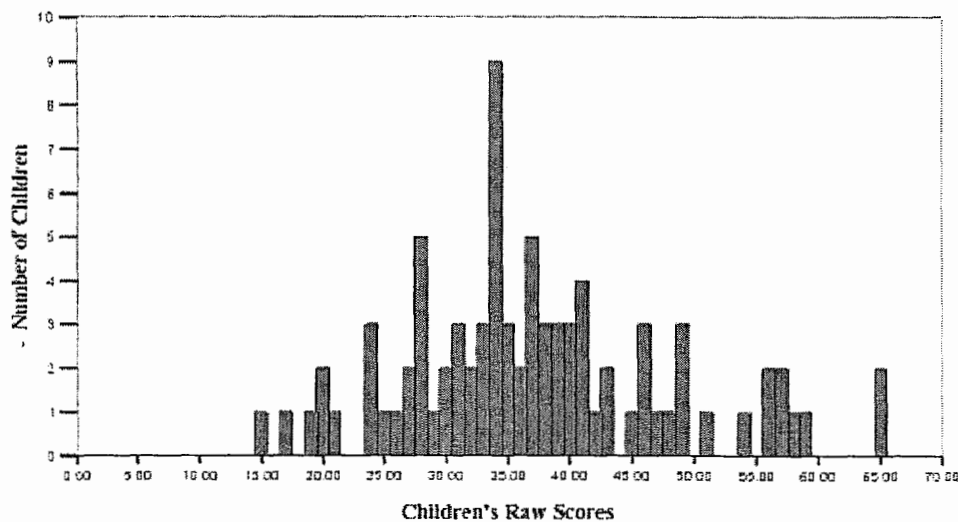
Ukraine

In Ukraine, Step by Step children's mathematical achievement was significantly higher than that of children in traditional programs ($p < .001$). The difference between scores of children in Step by Step kindergartens (Mean = 34.96; SD = 10.79) and those in traditional kindergartens (Mean = 28.92; SD = 8.98) was very large, as indicated by the effect size of .611, an effect size that is rarely seen in educational research. From Table IV.1 one can note the differences between average performances of Step by Step children and those from traditional programs. On average, Step by Step children displayed a more advanced sense of the relative magnitude of double-digit numbers and have made more progress in acquiring conventional mathematical skills related to knowledge of number facts and reading and writing double-digit numbers.

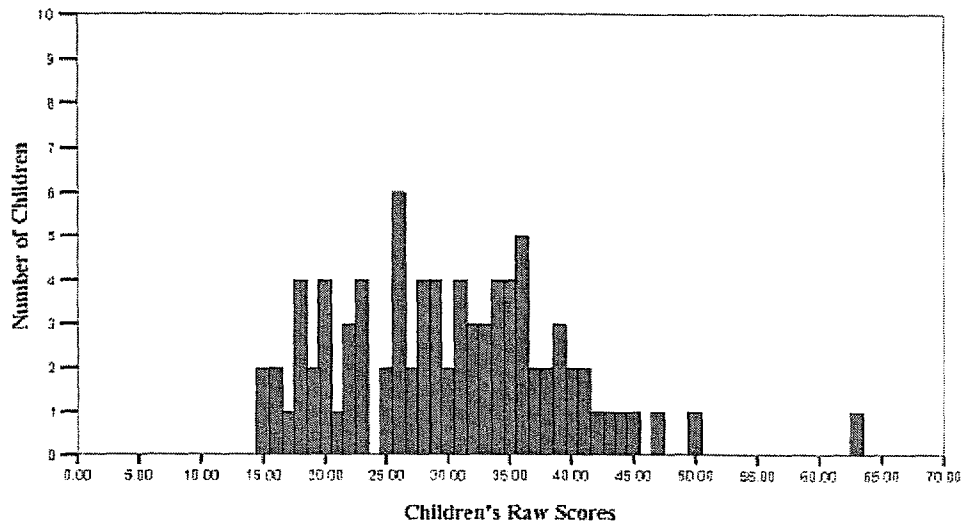
The graphs displaying frequencies of different scores (Figures IV.4a and IV.4b) reveal the impact the Step by Step program made at both ends of the

developmental continuum. Relatively low scores of 26 and lower were three times as frequent for children in traditional classrooms (37 percent) as for children from Step by Step classrooms (13 percent). Conversely, scores of 41 and higher, at the top of the developmental continuum, were nearly three times more frequent among children from Step by Step programs (31 percent) than among children from traditional programs (11 percent). Thus, the Step by Step program is more successful in supporting development of children across the developmental continuum.

**Figure IV.4a: TEMA-2
Ukraine: Step by Step (n=83)**



**Figure IV.4b: TEMA-2
Ukraine: Traditional (n=84)**



LITERACY

A central objective of schools that serve children between the ages of five and eight is to help them learn to read and write. Research in the U.S. has established the fact that children's early literacy development is a strong predictor of future academic performance. Literacy learning has also been a high national priority in all four countries we studied. Therefore, it is important that Step by Step programs support children's literacy development during these critical early years.

Considerable research by developmental and cognitive psychologists has established that literacy development, especially during the early years, is multifaceted. While reading and writing appear to be distinct skills, both draw on a common core of knowledge that children are constructing. This core of knowledge includes oral language in addition to more typical literacy-related knowledge (e.g., letter recognition, decoding, spelling). Our task, therefore, was to assess children's early literacy development broadly. To this end we used a broad-gauged assessment of early literacy, the Emergent Literacy Assessment (ELA) and a receptive vocabulary test. The ELA is divided into four subtasks: *Letter Identification*, *Emergent Writing*, *Early Reading*, and *Print Concepts and Reading Comprehension*. The receptive vocabulary tool was an adaptation of the Peabody Picture Vocabulary Test, Third Edition (PPVT-III). We worked closely with team members as we devised tools appropriate for local circumstances.

To provide the reader with a more qualitative sense of the results from each country, Table IV.2 describes what each ELA subtest involves and the number of points required to receive full credit. For each subtest we have clustered scores into rough groupings and have indicated the general developmental level associated with each cluster. These clusters are provided simply to help the reader conceptualize the relative developmental level of the "average" child.

**Table IV.2: Contents of the
Emergent Literacy Assessment (ELA)**

Subscale OVERALL TEST	Scoring <i>TOTAL poss.: 76 pts.</i>	Prompts	Range
Letter Identification Subscale <i>(8 upper case, 4 lower case letters)</i>	<i>total possible: 24 pts.</i>		
	2 points for naming letters and 1 point for pointing to letter named by assessor	“What letter is this?” <i>(letter naming)</i> “Can you show me the B?” <i>(letter identification)</i>	<i>4–8: Emergent</i> beginning to note letters of special interest <i>9–14: Early Mastery</i> familiar with several letters, name some on demand <i>15–22: Advanced</i> identifies and names many letters <i>23–24: Expert</i> solid letter knowledge
Emergent Writing Subscale	<i>total possible: 22 pts.</i>		
Name Writing <i>(writes own name)</i> Own Word Writing <i>(writes 2 words of own choosing)</i> Spelling <i>(writes 3 words)</i>	<i>total possible: 4 pts.</i> intends to write name, correct letters used <i>total possible: 9 pts.</i> directionality (2 pts.), grasp (1 pt.), spelling accuracy (9 pts). <i>total possible: 9 pts.</i> spelling accuracy	“Show me how you write your name.” “What did you write?” “Show me how you wrote it.” “Please write ... Spell it the best way you can.”	<i>2–5: Early Emergent</i> early sense of how writing is organized and what is expected when one is asked to write <i>6–8: Emergent</i> knows some conventional forms associated with familiar words <i>9–12: Early Conventional</i> associating initial sounds to symbols, some known words <i>13–18: Advanced</i> associating final and some medial sounds to symbols <i>19–22: Expert</i> grasp of sound-symbol correspondence for words in early writing repertoire
Early Reading Subscale <i>(reads own name and 8 more words of increasing difficulty)</i>	<i>total possible: 9 pts.</i>		
		“Can you tell me what this says?”	<i>1: Emergent</i> can only read own name <i>2–4: Early Conventional</i> some sight words <i>5–7: Advanced</i> associating initial sounds to symbols; early decoding skill <i>8–9: Expert</i> grasp of how to approach decoding; skill with initial reading vocabulary
Print Concepts and Reading Comprehension Subscale	<i>total possible: 21 pts.</i>		
Book & Print Concepts Comprehension	<i>total possible: 10 pts.</i> Book concepts (4 pts.) (handling, author) Directionality (2 pts.) Word/letter concept (2 pts.) Written-spoken word matching (2 pts.) <i>total possible: 11 pts.</i> literal recall (5), inferential (6)	How book is held. “What did (author) do?” Which way do you go when reading? “Show me a word.” Read and finger point “What happened first? Second?” “What do you think is going to happen?”	<i>4–8: Early Awareness</i> Some sense of book use, limited understanding of story line <i>9–13: Developing Reader</i> General sense of book use and print conventions; able to follow major thread of simple story line <i>14–18: Experienced Reader</i> Grasps basic print concepts; follows story line including most inferences <i>19–22: Veteran Reader</i> Solid grasp of print concepts; skilled at recalling details and inferring critical information

Bulgaria

Children in Step by Step and traditional programs scored at comparable levels in acquisition of literacy skills. Receptive vocabulary scores were not significantly different, and on the ELA, children's overall and subtest scores were also comparable. Table IV.3 shows that, on average, children in both settings demonstrated "advanced" letter identification skill, indicating that most children could name several letters and point to others. The writing mean scores of 14 placed children of both groups at the low end of the "advanced" grouping, reflecting ability to write some familiar words and beginning ability to sound out others. The word reading scores of 4 placed children near the top of the "early conventional" band, indicating that children are beginning to read some familiar words and that some are associating some sounds to letters. Children's scores on the *Print Concepts and Reading Comprehension* subscale suggested that, on average, children have a basic grasp of how books work and are developing some skill in understanding the vocabulary and following the plot line of a story. Thus, children in both programs are beginning to acquire knowledge required for reading and writing, and are just beginning to solidify basic understanding required for conventional reading and writing.

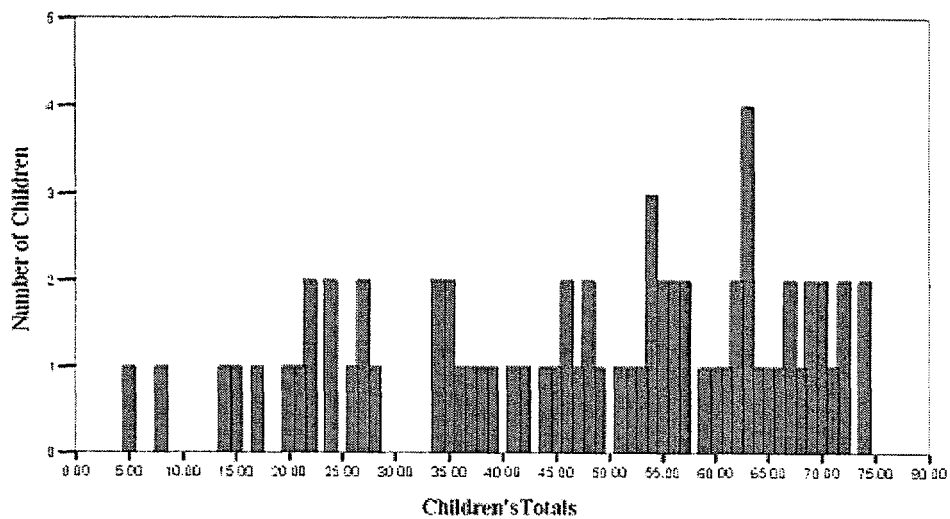
Table IV.3: Literacy Findings—Bulgaria

ELA	Step by Step			Traditional			Cohen's d
	Adj. Mean	SD	n	Adj. Mean	SD	n	
Letter Identification	17.9	6.99	69	16.76	7.70	70	.155 ^a
Emergent Writing	14.33	7.26	69	13.66	8.58	70	.085 ^a
Early Reading	3.95	2.97	69	4.11	3.25	70	-.051 ^a
Print Concepts and Reading Comprehension	15.16	3.61	69	14.68	4.94	70	.112 ^a
Total	51.76	18.58	69	49.65	21.72	70	.105^a
PPVT	83.40	27.73	70	86.23	32.13	70	-.095 ^a

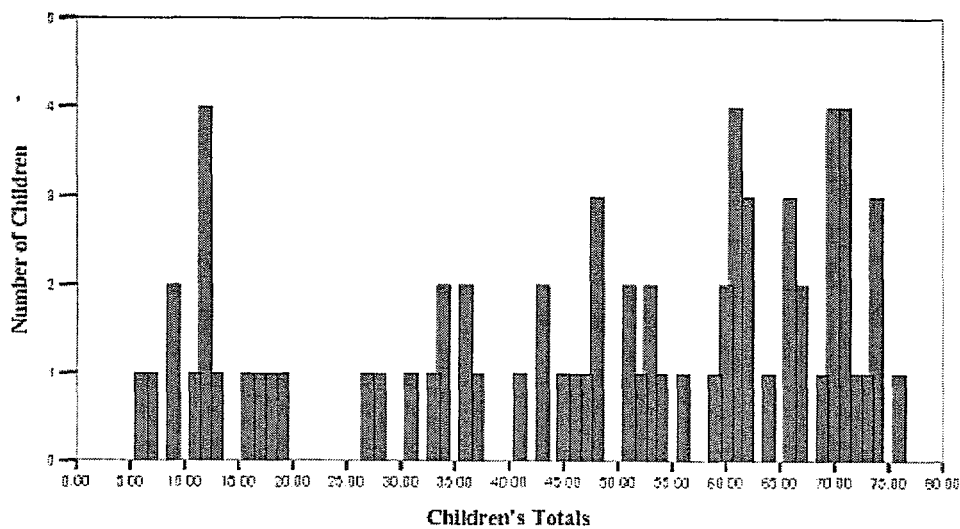
^a Not statistically significant

While differences between Step by Step and traditional kindergartens are not significant overall, frequency graphs suggest some potentially interesting differences in how these two kinds of programs support children's growth (see Figures IV.5a and IV.5b). Interestingly, different patterns appeared at the two extremes. If we look at children who received overall scores of less than 20 (a total score reflecting very limited grasp of literacy conventions), we find 14 children in traditional programs with such scores as opposed to only 6 Step by Step children. It seems that Step by Step may be somewhat more able to support the growth of children who are having some difficulty acquiring basic literacy skills. On the other hand, if we examine the number of children receiving scores of 54 or above, we find both programs to be comparable. These results are based on only a small number of children, but they suggest that both types of programs are supporting literacy development of many children. However, traditional programs may have difficulty meeting the needs of children in need of special support.

**Figure IV.5a: ELA
Bulgaria: Step by Step (n=70)**



**Figure IV.5b: ELA
Bulgaria: Traditional (n=70)**



Kyrgyzstan

In Kyrgyzstan, Step by Step kindergartens have had considerably more success than traditional kindergartens in supporting children's literacy development. Dramatic differences were seen on children's receptive vocabulary scores (adapted PPVT), with children in Step by Step programs receiving raw scores that averaged 20 points higher than children in traditional programs. Similar dramatic differences were evident on the ELA, with Step by Step children's average scores (Mean = 60.37; SD = 15.76) far surpassing the total mean scores received by children in traditional programs (Mean = 40.32; SD 26.23). A quantitative expression of the difference is the enormous effect size of .955.

If we examine the ELA subscales, we can understand the meaning of these differences in mean scores. On the *Letter Identification* subscale, children in Step by Step were solidly in the "advanced" score band, whereas children in traditional kindergartens fell into the "early mastery" band. Similarly, on the *Emergent Writing* subscale Step by Step children displayed "advanced" skills, whereas children in traditional programs were just beginning to construct conventional understandings of print. Similarly, on the *Early Reading and Print Concepts and Reading Comprehension* subscales, Step by Step children were a full score band above children in the traditional kindergartens. Thus, across all dimensions of early literacy, children in Step by Step programs were significantly ahead of children in traditional programs in literacy and language development.

Examination of frequency data in Figures IV.6a and IV.6b sheds light on the source of these enormous differences between the two kindergarten models. Thirty-two children in the traditional kindergarten sample (46 percent) received low total scores which fell below 20. In Step by Step classrooms only three children, 4 percent of the sample, received such low scores. Conversely, strong scores of 61 or higher were received by only 19 children in traditional classrooms (27 percent of the sample), but by 44 Step by Step children (63 percent). The bimodal distribution seen among children from traditional programs suggests that some children, perhaps those who enter school with home support for literacy,

have benefited from the traditional approach employed, whereas many other children have made limited progress.

Table IV.4: Literacy Findings—Kyrgyzstan

ELA	Step by Step			Traditional			Cohen's d
	Adj. Mean	SD	n	Adj. Mean	SD	n	
Letter Identification	19.44	6.79	69	13.18	8.80	70	.803 ^b
Emergent Writing	16.08	6.40	69	9.48	8.94	70	.860 ^b
Early Reading	6.83	2.94	69	3.72	3.66	70	.942 ^b
Print Concepts and Reading Comprehension	17.14	3.65	69	12.35	4.35	70	1.12 ^b
Total	60.37	15.76	69	40.32	26.23	70	.955^b
PPVT (Adapted)	91.61	30.03	70	71.44	31.56	70	.655 ^b

Statistical significance:

(a) $p < .001$

(b) $p < .0001$

**Figure IV.6a: ELA
Kyrgyzstan: Step by Step (n=70)**

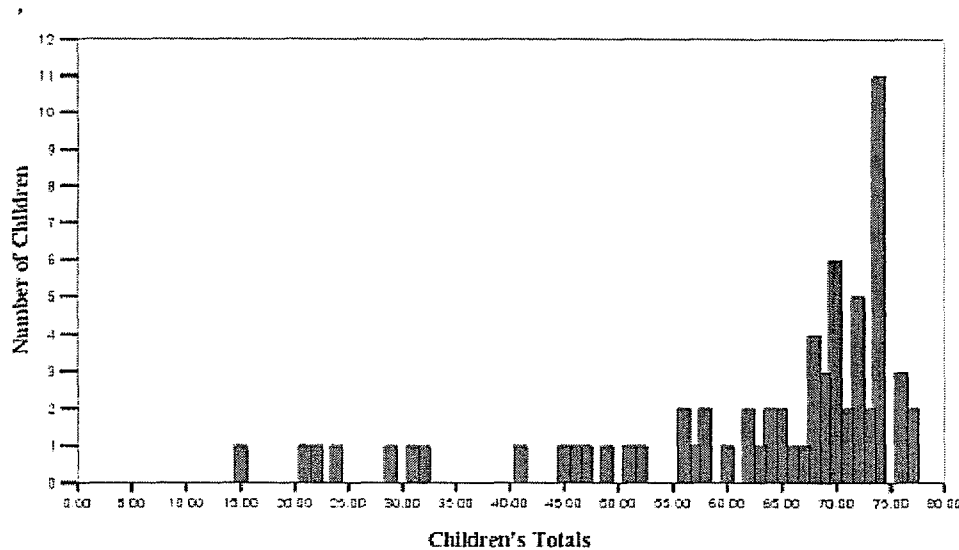
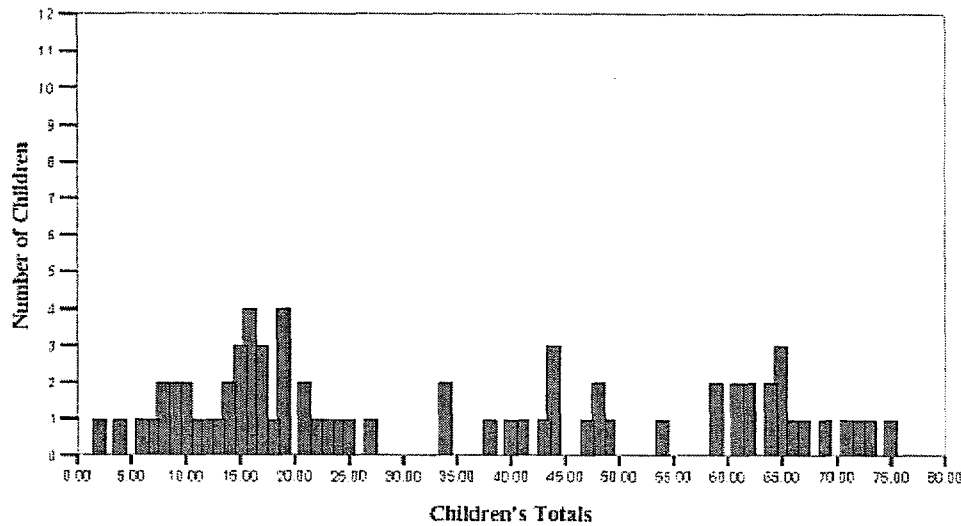


Figure IV.6b: ELA
Kyrgyzstan: Traditional (n=69)



Romania

Children in Step by Step and traditional kindergartens in Romania are making comparable progress toward acquiring early literacy skills. Mean scores on the receptive vocabulary test (adapted PPVT) were nearly the same (Mean = 76.6; SD = 77.2) and total ELA scores were similar (Mean = 40.7; SD = 37.4). Examination of subscales revealed comparable scores for children in both programs. On *Letter Identification*, the average scores placed children in the “early mastery” score band, indicating beginning ability to identify and name a few letters. The *Emergent Writing* scores of children in both programs placed them at the upper end of the “early conventional” band, indicating that, on average, children knew some words and were beginning to associate initial sounds of words with symbols. *Early Reading* scores also placed children in the “early conventional” score band, indicating that children could read their own name and were just beginning to be able to read other words. *Print Concepts and Reading Comprehension* results also

placed children at the “developing reader” level, suggesting that they were beginning to understand how to handle books and how to follow major aspects of the story line of a book.

Table IV.5: Literacy Findings—Romania

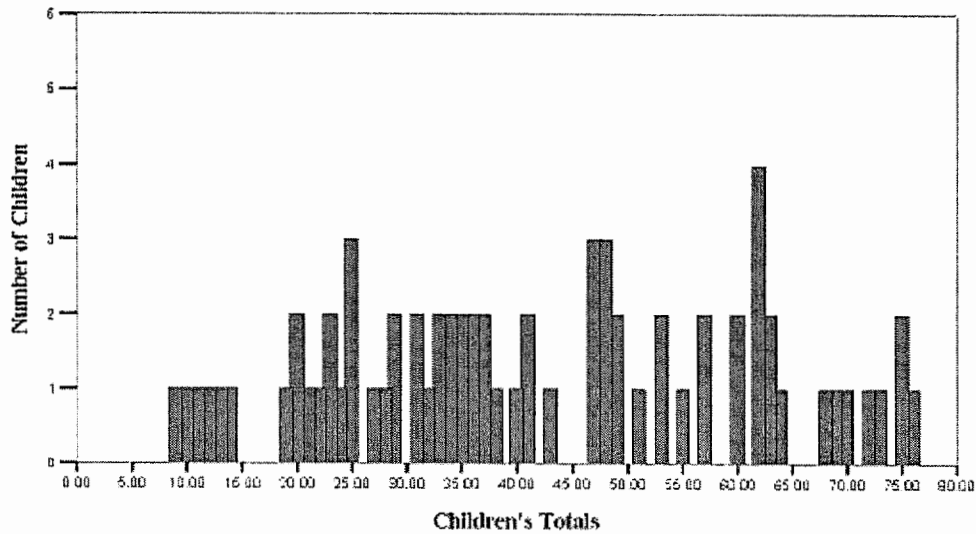
ELA	Step by Step			Traditional			Cohen's d
	Adj. Mean	SD	n	Adj. Mean	SD	n	
Letter Identification	12.91	7.18	70	11.63	7.15	70	.179 ^a
Emergent Writing	12.25	7.41	70	11.44	7.67	70	.107 ^a
Early Reading	2.80	3.14	70	2.22	2.97	70	.190 ^a
Print Concepts and Reading Comprehension	12.70	3.64	70	12.36	3.32	70	.098 ^a
Total	40.66	18.53	70	37.38	18.56	70	.177^a
PPVT (Adapted)	76.63	19.57	70	77.23	14.58	70	-.035 ^a

^a Not statistically significant

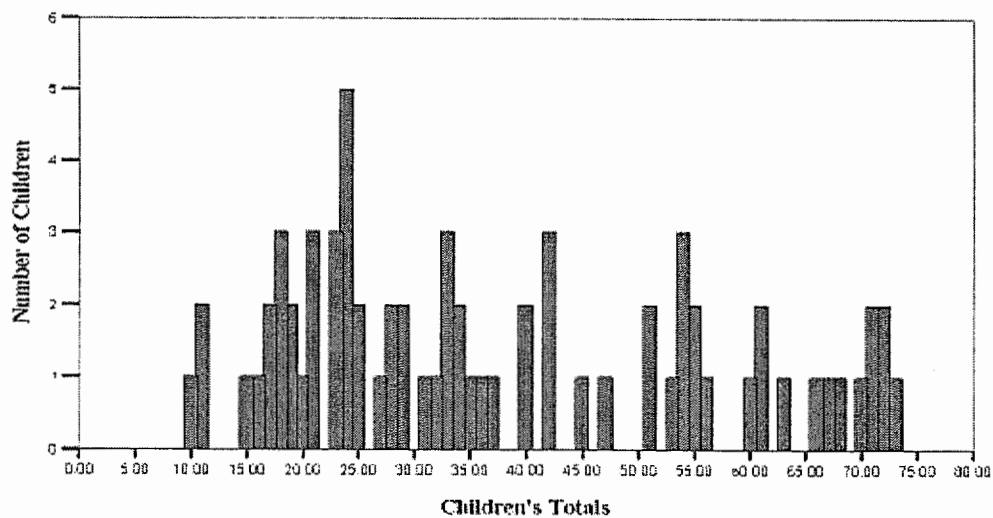
Examination of frequency data (see Figures IV.7a and IV.7b) revealed trends that suggest that the overall impact of these two approaches to education may be having differential effects that do not appear when overall means are compared. Scores below 26 were somewhat more frequent among children in traditional kindergartens (37 percent of the sample) than among Step by Step children (26 percent of the sample). Also, higher scores of 57 and greater were somewhat less frequent among children attending traditional kindergartens (19 percent of the sample) than among children in Step by Step classrooms (27 percent). It is likely that these differences in the extreme scores did not result in overall statistically significant differences, because children in the middle range showed somewhat stronger performance in traditional programs. Thus, it seems that Step by Step programs help support growth of less well-prepared children and may be

nourishing somewhat more rapid development of children who start with a stronger foundation.

**Figure IV.7a: ELA
Romania: Step by Step (n=70)**



**Figure IV.7b: ELA
Romania: Traditional (n=70)**



Ukraine

Children in Ukraine, regardless of program type, demonstrated relatively high mean scores (Mean = 63.01; SD = 60.69). There were no statistically significant differences in ELA scores, but raw receptive vocabulary scores of Step by Step children were more than 10 points higher than those of children in traditional kindergartens, a difference that is statistically significant.

Review of the subscale scores revealed that, on average, children in both types of programs were quite skilled at *Letter Identification*. *Emergent Writing* and *Early Reading* scores were also strong, with children in traditional programs falling in the middle of the “advanced” score band and children in Step by Step programs appearing toward the upper end of this score band. Scores on the *Print Concepts and Reading Comprehension* subscale were low relative to the scores on the other subscales, with children in both programs at the low end of the “experienced reader” band. It is worth noting that children in both programs approached the ceiling score of 24. This result suggests that a larger sample or an assessment battery with more challenging items might reveal more information about children’s literacy development.

Table IV.6: Literacy Findings—Ukraine

ELA	Step by Step			Traditional			Cohen’s d
	Adj. Mean	SD	n	Adj. Mean	SD	n	
Letter Identification	22.03	2.75	83	22.32	3.19	84	-.098 ^a
Emergent Writing	18.18	3.78	83	16.93	5.78	84	.261 ^a
Early Reading	7.65	2.05	83	7.08	2.89	84	.231 ^a
Print Concepts and Reading Comprehension	15.10	3.36	83	14.28	3.73	84	.231 ^a
Total	63.01	9.76	83	60.69	13.01	84	.204^a
PPVT	101.37	23.40	83	90.76	20.27	84	.486 ^b

^a Not statistically significant

^b $p < .0083$

Frequency data in Figures IV.8a and IV.8b revealed an interesting pattern which possibly points to differential effects of the two approaches to literacy. First, both types of kindergartens appeared to be providing basic support to all children, since there were no extremely low scores (i.e., nothing below 21), and very few scores below 35. That said, it appeared that Step by Step may be somewhat more successful in ensuring that all children are making strong literacy progress. A comparison of the number of children with scores of 64 and below revealed that 37 percent of the children in traditional programs received such “average” scores; whereas only 19 percent of the children in Step by Step classrooms received such scores.

**Figure IV.8a: ELA
Ukraine: Step by Step (n=83)**

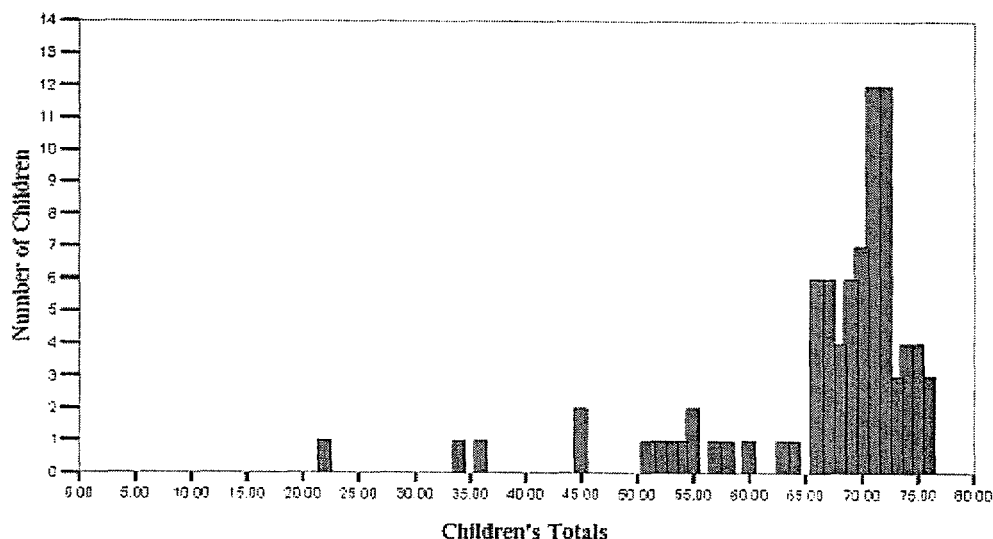
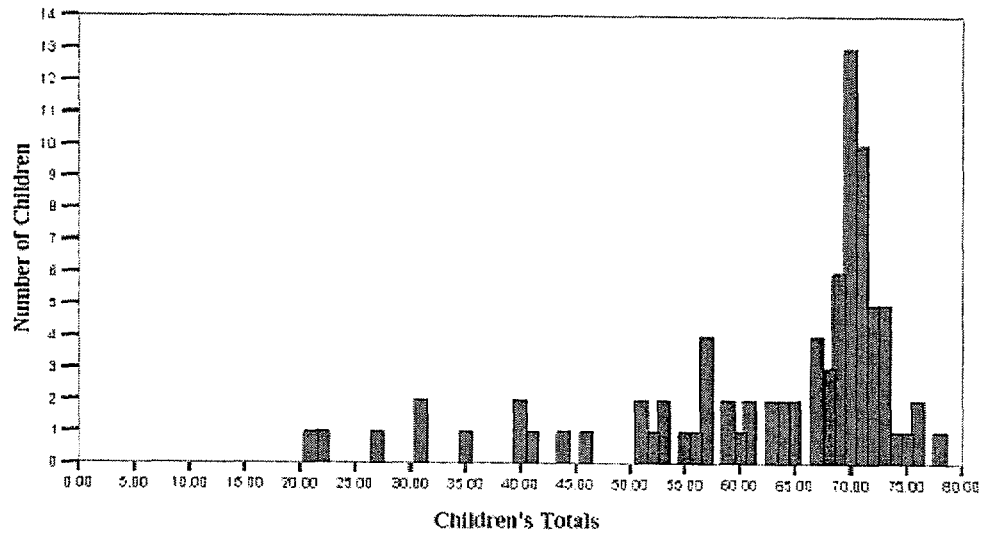


Figure IV.8b: ELA
Ukraine: Traditional (n=84)



CREATIVITY

One of the distinctive features of the Step by Step approach is its emphasis on encouraging children's creative problem solving. Although research on creativity has been done, it is extremely rare to include measures of it in a program evaluation. This is because we do not know the extent to which such measures are sensitive to performance differences that are affected by children's classroom experiences. Despite this methodological challenge, we included the best available measures of creativity in our child assessment battery. We used two subtests of the Torrance Tests of Creative Thinking; *Product Improvement* and *Unusual Uses*. Each of these tasks were scored using three scales: fluency, flexibility, and originality. Fluency assesses children's ability to generate several responses when asked, for example, what they might do with an empty box. Flexibility refers to children's ability to generate responses from a number of different categories (i.e., "candy store, airplane, telephone booth" vs. "candy store, grocery store, clothing store"). Originality refers to the child's ability to produce responses that are deemed by the test constructors to be "unusual." For a response to be considered "unusual" it must not appear on a list of "typical" responses. Thus, across the two tasks we obtained scores on these three dimensions of verbal creativity for each child.

Bulgaria

Among children in Bulgaria, we found no significant differences between the children on any dimension for either of the subtests (see Table IV.5). However, the data did indicate an advantage of Step by Step children over children in traditional programs on the *Product Improvement* subtest. On all other dimensions, on each task children from both programs performed equally well.

Table IV.7: Torrance—Bulgaria

	Step by Step		Traditional		Cohen's d
	Adj. Mean	SD	Adj. Mean	SD	
Product Improvement					
Fluency	7.08	4.48	6.48	5.04	.126 ^a
Flexibility	3.12	1.82	3.31	2.41	-.090 ^a
Originality	4.54	3.27	3.87	3.65	.193 ^a
Unusual Uses					
Fluency	5.78	5.77	5.80	5.01	-.004 ^a
Flexibility	4.16	3.24	3.93	2.57	.079 ^a
Originality	3.03	4.14	3.16	3.82	-.099 ^a

^a Not statistically significant

Kyrgyzstan

In Kyrgyzstan there were no statistically significant differences between children from Step by Step kindergartens and traditional kindergartens (see Table IV.6). While there were no significant differences, on every subscale children from Step by Step scored slightly higher than children in traditional programs. This trend was especially apparent in the fluency and flexibility items on both activities.

Table IV.8: Torrance—Kyrgyzstan

	Step by Step		Traditional		Cohen's d
	Mean	SD	Mean	SD	
Product Improvement					
Fluency	4.43	2.36	3.77	2.16	.292 ^a
Flexibility	2.91	1.54	2.53	1.42	.257 ^a
Originality	1.13	1.49	.87	1.05	.205 ^a
Unusual Uses					
Fluency	5.67	3.74	4.56	2.05	.383 ^a
Flexibility	3.61	2.08	2.95	1.30	.391 ^a
Originality	1.54	1.72	1.27	1.17	.187 ^a

^a Not statistically significant

Romania

In Romania there was some evidence that children in Step by Step programs were able to be more creative than children in traditional kindergartens. On the flexibility subscale of the *Unusual Uses* task, Step by Step children performed significantly better ($p < .001$) than children from traditional classrooms, with the magnitude of these differences indicated by the educationally important effect size of .432. In addition, it is interesting to note that the mean showed a trend toward greater fluency and creativity in Step by Step children in the *Unusual Uses* task and for the flexibility subscale in the *Product Improvement* task.

Table IV.8: Torrance—Romania

	Step by Step		Traditional		Cohen's d
	Adj. Mean	SD	Adj. Mean	SD	
Product Improvement					
Fluency	5.40	3.83	5.06	3.39	.094 ^a
Flexibility	3.08	1.80	2.62	1.42	.286 ^a
Originality	2.71	2.48	2.3	2.29	.138 ^a
Unusual Uses					
Fluency	6.11	4.95	5.01	3.28	.267 ^a
Flexibility	4.06	2.77	3.08	1.77	.432 ^b
Originality	2.81	3.29	2.06	2.25	.271 ^a

^a Not statistically significant

^b $p < .01$

Ukraine

Children's scores on the *Unusual Uses* subtest provided some evidence that children in Step by Step classrooms are more creative than children in traditional programs. On their flexibility scores, Step by Step children scored significantly higher ($p < .05$) than traditional children, with this difference associated with a moderate effect size of .354. While there were no other statistically significant differences, on the other two subscales for this activity children from the Step by Step classrooms received slightly higher scores on average than did children from traditional programs.

Table IV.10: Torrance—Ukraine

	Step by Step		Traditional		Cohen's d
	Adj. Mean	SD	Adj. Mean	SD	
Product Improvement					
Fluency	3.39	2.10	3.45	2.91	.012 ^a
Flexibility	2.00	1.62	2.05	2.39	-.025 ^a
Originality	2.24	1.71	2.27	2.47	-.014 ^a
Unusual Uses					
Fluency	5.74	4.53	4.68	3.65	.259 ^a
Flexibility	2.25	1.62	1.54	2.39	.354 ^b
Originality	3.96	3.31	3.12	3.08	.263 ^a

^a Not statistically significant

^b $p < .05$

SUMMARY

Findings for Bulgaria

Across all of the child assessment tasks, children in the Step by Step program seem to be performing at the same level as children in traditional programs. However, examination of trends revealed several hints suggesting areas worthy of further investigation. When comparing children with relatively low scores and ELA from the two types of kindergartens, we found a somewhat higher frequency of low scores among children from Step by Step children on TEMA-2. In contrast, we found that there were more low scores among children in traditional programs on the ELA. These results suggest the possibility that, when working with children who come to school less prepared for academic learning, Step by Step teachers may be more effective in supporting early literacy than early numeracy.

Findings for Kyrgyzstan

There were dramatic differences between children in Step by Step and those in traditional programs on all measures of academic achievement (i.e., numeracy and literacy). Results in mathematics showed an extraordinary effect size of .761, a magnitude that indicates a difference of considerable educational importance. Literacy results were equally impressive, with adapted PPVT results and scores on each of the ELA subscales being significantly higher for Step by Step children.

Findings for Romania

In Romania, there was evidence that children in the Step by Step kindergartens were making better progress than children in traditional programs. In mathematics we found significant differences associated with moderate effect sizes. Children in Step by Step classrooms from both the low and high ends of the developmental spectrum seemed to be gaining more mathematical understanding than were children in traditional programs. While differences between programs on the ELA were not statistically significant, there was evidence that Step by Step classrooms may be somewhat more successful in supporting the development of children with

the weakest early literacy skills. Finally, there was clear evidence of Step by Step children's stronger performance on the flexibility scale of the *Unusual Uses* task, suggesting that these classrooms are nurturing children's creativity more effectively.

Findings for Ukraine

In Ukraine, Step by Step children outperformed children in traditional programs in mathematics. The differences were highly significant and showed an effect size of .611, a magnitude of considerable educational importance. Significant differences favoring Step by Step were also seen on our measure of receptive vocabulary. However, children in Step by Step and traditional programs received similar scores on other measures of early literacy. Finally, there was also evidence that Step by Step settings are more effectively supporting children's verbal creativity as children showed stronger performance on the flexibility subscale of the *Unusual Uses* subtest.

CHAPTER V: SUSTAINABILITY

An important goal of this evaluation is to examine the sustainability of the Step by Step program. Sustainability relies on a complex constellation of factors including expansion, program quality, institutional capacity, and the program's integration into key educational systems.

In this chapter, we will address the following research questions:

Can the Step by Step Program become sustainable (economically and in practice)? What, if any, organizations have been formed to help sustain the program and how have these organizations been formed? What evidence is there of an increasing demand for the Step by Step Program?

What is the potential for Step by Step schools to become centers for staging broader community-based activities such as elder care, health care, adult education, or distribution centers for goods and services?

To what extent can the interests and energies of engaged parents also be directed toward other community development initiatives?

Here we report data from a number of sources including all of the child and classroom measures, the Teachers' Beliefs and Practices Survey (TBPS), the Program Implementation Survey (PI), the Kindergarten Directors' Questionnaire (KDQ), the Participatory Results-Oriented Self Evaluation (PROSE), interviews with representatives of the ministries of education, and other background information provided by the country teams and Children's Resources International (CRI).

INDICATORS OF SUSTAINABILITY

Expansion of the program itself is, perhaps, the most direct way to gauge sustainability. This is particularly true in early childhood education. Young children have not yet reached the age of compulsory (and therefore, free) education. Parents can make informed choices about the school their child attends;

thus, programs that are of high quality attract more enrollment and expand. By examining the enrollment figures of Step by Step over time, we have an index of the program's ability to maintain, or even increase, its services in the future.

One cannot examine expansion, however, without considering the ways in which a program establishes mechanisms to control quality. Quality can easily be threatened when pilot projects or other initiatives go to scale. Because Step by Step has undergone rapid expansion, examining the program's mechanisms for maintaining quality is crucial.

Closely related to quality is the institutional capacity of Step by Step within each country. In the newly-independent states, the move toward privatization is an important sign of maturity. By becoming a Non-Governmental Organization (NGO) and leaving the "safety" of the regional foundations behind, Step by Step programs are making a move toward independence. To sustain this move, they must diversify their funding sources.

Institutional capacity can also be examined in light of the program's infrastructure. To help determine the viability of their infrastructure, we will examine Step by Step's use of Model Training Sites (MTSs) to determine the extent to which the sites contribute to the support and dissemination of the model. Finally, we will assess Step by Step's infrastructure by examining strategic program objectives and management practices that are used to accomplish these objectives.

The last indicator of sustainability to be examined is that of the program's integration into key educational systems in the country. One of the guiding principles of Step by Step is that it supplements but does not supplant government funding. Therefore, Step by Step requires active government support to succeed. The most important government partner for Step by Step is the national ministry of education, an institution that is not only responsible for accrediting programs but also for charting the course for education reform. The ministry also regulates the certification of teachers and their in-service training. The extent to which the ministry understands, adopts, and promotes Step by Step will, therefore, influence

the future viability of the program. For Step by Step to continue, higher education institutions will also have to embrace the Step by Step methodology, producing teachers who will be recognized by the state. Further, in order for students to learn the fundamentals of Step by Step, higher education faculty themselves will have to be knowledgeable about the underlying features of the program and be able to supervise students in their student teaching and practica assignments.

Expansion of the Program

Step by Step has been operating in Bulgaria, Romania, and Ukraine since 1994 and in Kyrgyzstan since 1995. Since its inception in each of these countries, Step by Step has expanded in a number of ways. Initially, countries introduced the Step by Step methodology to between 7 and 10 kindergarten sites. (See Table V.1.) The four countries began with 14 to 23 classrooms at those sites.

Table V.1: Step by Step Kindergartens and Classrooms (1998-99)

	Bulgaria		Kyrgyzstan		Romania		Ukraine	
	<i>Classrooms</i>	<i>Sites</i>	<i>Classrooms</i>	<i>Sites</i>	<i>Classrooms</i>	<i>Sites</i>	<i>Classrooms</i>	<i>Sites</i>
Total	223	38	46	9	72	*	80	20
Initial	14	7	14	7	18	7	23	10
Expansion	173	30	32	2	54	*	57	10

* Not reported

Since the start of the program, countries have added expansion classrooms at a prodigious rate. If we take into account both initial and expansion classrooms operating in the 1998-99 school year, Kyrgyzstan and Ukraine have more than doubled their original number of classrooms through expansion; Bulgaria and Romania have tripled the number of classrooms through the addition of expansion classrooms.

Parallel to the increases in classrooms and sites was the increase in Step by Step enrollment. (See Table V.2.) Over a two-year period, enrollment increased from

34 percent in Romania to 83 percent in Bulgaria. For a program that has been in existence for four years, such an increase in enrollment is remarkable.

Table V.2: Increase in Enrollment in Sample Kindergartens

	Bulgaria	Kyrgyzstan	Romania	Ukraine
'96 Enrollment	579	452	732	621
'98 Enrollment	1,062	672	982	989
% of increase	83%	49%	34%	59%

This demand for kindergartens has expressed itself in a demand for added services as well. As a result, Step by Step now includes services for infants and toddlers (1.5 years to 4 years), while also serving primary school children (up to 10 years old in some countries). (See Table V.3.) The increasing demand for Step by Step expansion is also evident in parents' responses. In Ukraine, for example, parents successfully advocated for expansion into primary schools on a local television show. Such advocacy illustrates how the efforts of parents can have an impact on program expansion.

Table V.3: Infant/Toddler and Primary Classrooms (1998-99)

	Bulgaria	Kyrgyzstan	Romania	Ukraine
Infant	13	22	10	18
Primary	46	46	97	23

These extensions upward and downward signify not only a quantitative increase in Step by Step but also a significant movement toward developing a birth through primary school continuum. Moreover, these extensions reveal the program's ability to develop and implement services that are responsive to diverse groups. For example, the Step by Step curricula for infants and toddlers and for children in primary school are substantively different from those used in the kindergartens. Infant/toddler programs focus on health and parenting issues and build even greater ties with families. In contrast, the expansion of services into primary

schools involves a different focus, namely the coordination with other components of the educational system.

Quality of the Program

As reported indepth in chapters II, III, and IV, Step by Step classrooms in the four countries of this study have demonstrated their quality through various goal-related measures. By direct classroom observation (ECCO) and through the reports of the teachers about their own beliefs and practices (TBPS), we have seen that Step by Step classrooms employ democratic practices significantly more than traditional classrooms.

In addition, the academic achievement of children in Step by Step is at least equal to if not higher than that of children in traditional programs. This was the case for mathematics and for measures of literacy including oral language as well as emergent reading and writing. Step by Step children also demonstrated more creativity in the important area of flexibility of thinking than did children in traditional programs. The Step by Step model, then, not only supports children's academic achievement, but also provides children with experiences that foster the acquisition of beliefs and behaviors required for effective citizenship in democratic societies.

But are the positive effects of the model sustainable? Is there evidence of quality control in the dissemination of the model throughout the countries? It is important to look closely at expansion classrooms to answer these questions because expansion classrooms, unlike initial classrooms, did not receive the same level of financial resources for classroom furnishings, materials and supplementary professional staff. Expansion classrooms received much more modest support. Such an approach was instituted as an economically viable alternative with more potential to be sustained in the future.

We need only look to the results of the ECCO for evidence of quality of the Step by Step expansion model. When comparing initial and expansion classrooms, we see that there is no difference in the way that teachers interact with children, the

child-centered curriculum that is offered, or the organization of the physical environment. (For a review of these data see chapter IV, Table IV.1.) Thus, Step by Step has been able to expand rapidly beyond its original seeds and still retain the qualities of the classroom environment that promote the development of young citizens for a democratic society. This quality has not been diluted by the passage of time or by lack of proximity to the Step by Step country team. Despite its rapid expansion, Step by Step has maintained the quality program with which it began.

Teachers have played a critical role in ensuring program quality. Not only have they embraced the Step by Step methodology, they have played an active role in shaping the educational environment in which they teach. Step by Step teachers have more decision-making power than teachers do in traditional schools and they are often encouraged to share their opinions about important professional issues. These teachers have the power and the will to make the program their own.

Parents, too, are actively involved in and committed to the program and this, too, is key in Step by Step's sustainability. In initial classrooms, there is direct evidence of increased parent presence as compared to traditional classrooms. Because the program has made parents active partners in their children's learning by inviting them into the classroom, providing space and educational materials for their use, and in granting them important roles in the governance of the kindergartens, parents have become invested in the quality of Step by Step. There is no stronger advocate or harder worker than a parent who is an active partner in his/her child's school.

Institutional Capacity

The institutional capacity of the Step by Step program can be gauged by many sources of data collected in this study: by the KDQ, PI, and through PROSE. Data collected from these instruments revealed information about the management infrastructure, including the development of NGOs, the diversification of programs' funding base, and the use of Model Training Sites (MTSs) to build Step by Step organizational capacity.

Management Infrastructure

Country teams report working well together, functioning in a manner in which goals and responsibilities are shared. They also report that democratic principles are upheld within the team: in the conduct and effectiveness of meetings and in the flow and usefulness of information needed for a high performance team. Country teams have also indicated that they have developed considerable capacity to provide successful training opportunities for kindergarten staff.

Despite these strengths, country teams identified management practices that need improvement. One area in which country teams' self-assessments converged was the use of systematic assessment data to refine program services. Teams revealed that they could improve their program evaluation mechanisms on two levels. First, they indicated that they could do a better job of assessing the impact of local kindergartens in meeting the intended goals of the program. While all teams agreed that they have had strong systems in place to determine the impact of local programs on children's development and learning, they have not yet extended these mechanisms to families and communities.

Second, teams reported that they could further develop strategies for assessing the impact of their training and technical assistance to Step by Step kindergartens. While all four teams indicated that they have developed clear criteria for evaluating their services, they reported that they have not applied these criteria regularly. These findings are not surprising given teams' current stage of organizational development. At the same time, these findings suggest programs' abilities to reflect on their management practices—a critical characteristic of effective learning organizations. Such self-assessments will become even more critical to their long-term success as Step by Step country teams move forward as NGOs.

Although countries are in different stages of attaining NGO status, they share similar goals: to become independent from the regional foundations, to seek outside funding, and to expand even more in their countries. Romania was the first to attain NGO status in the Step by Step network; it was granted NGO status in

March 1998 and has a current operating budget of \$791,340. Securing space for its offices was one of the first and most formidable problems faced during this transition, especially since space is an expensive commodity in Romania. NGO status has also brought with it a number of other complicated and expensive legal requirements, including the hiring of two accountants, which raised the central staff to 7.5 full-time equivalent professionals (FTEs). The Romanian Step by Step team's goals in becoming an NGO were, in addition to attaining independence and opening up more fund-raising opportunities, to become more involved in the decentralization of education in Romania and in its education reforms.

Bulgaria became an NGO in April 1998 in order to seek independence from the regional foundation and now boasts an annual operating budget of \$1 million. With a team consisting of 4 FTEs, this group has moved energetically to expand the program at an unprecedented rate, not matched by any country in the network. Step by Step in Bulgaria had an ambitious beginning in 1994 with 14 classrooms in 7 kindergartens; now there are 223 kindergarten classrooms operating in 38 kindergartens. Along with the impressive number of sites, the Bulgarian program has established 20 MTSs. In becoming an NGO, Step by Step in Bulgaria had one overarching goal—to build a high-quality program that would eventually be adopted as the major preschool methodology in the country.

Kyrgyzstan attained NGO status during the course of this evaluation—in October 1998. In seeking independence from the regional foundation, the country team, consisting of 3 FTEs, has faced important legal challenges. The Kyrgyz team describes these as difficulties in registering the program with the Ministry of Law, the Tax Inspector, and the notarial office. Throughout this arduous process they remarked that they have drawn strength from the qualities described in a Kyrgyz proverb: "Patience and labor overcome everything."

The Ukrainian country team consists of 4 FTE professionals, who continue to work as part of the Renaissance Foundation in Kyiv. While not yet an NGO, attaining this status is high on the team's list of priorities and the team foresees reaching NGO status during 1999. The three biggest challenges the team

anticipates are to find affordable space for themselves; to successfully overcome the legal obstacles; and to bring together the best professional team to operate as an NGO. In preparing for this transition, the staff has already received training in general management, financial management, and marketing. Ukraine's Step by Step program currently has an operating budget of \$534,600, granted by OSI New York and the regional foundation.

Funding Diversification and Financial Management

While NGO status has been sought (and achieved in most cases) by the programs in this study, their ability to succeed depends on a number of factors. One of these is the procurement of outside funding and the other is the development of financial management practices.

The effects of the economic crisis are keenly felt in all four countries, and outside funding is not readily available. Nevertheless, Bulgaria now receives approximately one percent of its funding from outside sources such as UNICEF, private companies and factories, and other NGOs as well as from the ministry of education. With a total annual budget of \$1 million, this means that the Bulgarian NGO has been able to muster \$10,000 in outside support for its organization.

Because their NGO status is very new, Kyrgyzstan has secured only limited support to supplement the \$380,000 received from OSI and the regional foundation. In 1997, they received a donation of \$2,000 worth of books, which were distributed to all kindergartens. In addition, the ministry of education supplied some funds for supplies and renovations.

Although the Romanian Step by Step team has not yet succeeded in securing outside private funding, it has negotiated considerable benefits from the ministry of education. It is through the Step by Step program's efforts that the ministry has assumed the cost of the second classroom teacher in all classrooms. The estimated value of this contribution is \$178,000. This is particularly impressive since Romania has sustained recent cutbacks to their general education budget. The ministry also donates soap, toothpaste, and other hygiene supplies to the program.

The Step by Step program has received in-kind donations of materials and services from companies such as Proctor and Gamble as well. Recently, a heating system in one kindergarten was repaired by a local company and a plumbing and sewage system was added in another for an estimated in-kind benefit of \$100,000. We see, then, that during this period of program development in Romania, the country team is building financial ties to both the key government and private sectors.

Although Step by Step in Ukraine has not yet secured additional funds, they do receive in-kind donations from Coca-Cola. They also receive funding from the Military Re-Training Program that supports the salary of the wives of ex-military people to work as teacher assistants. The ministry of education also provides some funding for capital renovation and for school supplies such as paper. Fund-raising by Step by Step staff at the kindergarten level has also garnered medicine, medical equipment, food, and educational materials for the kindergartens. The Ukrainian Step by Step team views their close ties with key stakeholders as important assets as they move forward.

Development of a Model Training Site (MTS) System

The development of an organizational infrastructure is another way that Step by Step has promoted sustainability of the program. Step by Step programs have developed a network of MTSS to disseminate the Step by Step methodology. MTSS offer a range of outreach services including training and consultation to kindergarten staff, practica for student teachers, and materials dissemination. Country teams select which of the operating Step by Step kindergartens will serve as MTSS. The country teams also provide added support to these MTSS and frequently co-train with their staffs. Currently, there are 20 MTSS in Bulgaria, 10 in Kyrgyzstan, 11 in Romania, and 21 in Ukraine.

Our data has shown that there was great variation among countries in the number of events and the participants per event offered at MTSS over an 11-month period. (See Table V.4.) For example, Romania, with a staff of 7.5 FTEs and 11 MTSS

reported three teacher training events that involved 1,155 participants. These were large conferences in which, on average, 385 teachers participated. In contrast, Ukraine, with a country team of 4 FTEs and 21 MTSs conducted 36 teacher-training events for 770 teachers. These events were much smaller, serving, on average, 21 teachers per event. Data indicated that these two countries appear to have adopted two different strategies in using MTSs. Romania's training model appears centralized while Ukraine's seems to be distributed around the country. However, the scope of this evaluation did not include examination of the quality of training and associated learning for participants, so it is impossible to comment on the relative merit of each approach. These two distinct approaches bear further watching as the program evolves.

While MTSs were designed to serve as "vanguards" of the Step by Step model, there have been a number of barriers in the implementation of and reaction to the system. One interesting challenge in the adoption of MTSs was shared by members of the Romanian team. They noted that, "in the Romanian education system, all kindergartens have the same status. It was very difficult at the beginning to have MTSs offering training to other kindergartens." Since all kindergartens had been the same in the old system, elevating one to the level and status of MTS was not easily accepted at first. It would not be surprising if this type of resistance had existed in other country teams as well.

The data show, then, that even though the Step by Step program is no more than four years old in the countries in this study, it has already developed an infrastructure for training and dissemination of the Step by Step model. In the period from January to November (1998) 2,395 teachers and more than 795 administrators attended training sessions. Orientation to the Step by Step program was attended by at least 1,923 persons and 2,810 persons attended parent education/ involvement sessions.

**Table V. 4: Number of Participants/Events Served by MTSS
(January – November 1998)**

		Bulgaria	Kyrgyzstan	Romania	Ukraine
<i>Teacher Training</i>	# of events	4	21	3	36
	Total Participants	120	350	1155	770
	Avg. # of Participants	30	17	385	21
<i>Administrator Training</i>	# of events	2	—	1	43
	Total Participants	60	—	90	645
	Avg. # of Participants	30	—	90	15
<i>Orientation to Step by Step</i>	# of events	10	*	3	60
	Total Participants	300	*	100	1523
	Avg. # of Participants	30	*	33	25
<i>Parent Education/ Involvement</i>	# of events	8	*	3	120
	Total Participants	160	*	450	2200
	Avg. # of Participants	20	*	150	18

*Exact figures not reported.

Integration into Key Educational Systems

The future of Step by Step depends on the extent to which ministries of education accept the program as a viable approach and support its continued expansion. Recognizing the importance of its relationship with ministries, the Step by Step model has always emphasized collaboration with government agencies at the national and local levels. While cooperative relationships have always been a key feature of Step by Step, a formal strategy for influencing institutions of higher education came about only once the program was underway. CRI reports that country teams soon identified the need for developing strategic relationships with teacher education programs. With expansion, there was growing demand for teachers trained in the methodology—in both preservice and inservice education.

Ministry of Education

To learn more about Step by Step's working relationship with ministries of education, host-country researchers conducted extensive interviews with ministry

representatives and local education authorities. What is striking about all of the interviews is their positive tone and respondents' intimate and accurate knowledge of the Step by Step model. Throughout the interviews, respondents also exhibited a deep understanding and appreciation of the components of the program and its philosophical underpinnings. Describing Step by Step's classroom environment, a Romanian interviewee stated that

Step by Step classrooms generate intellectual liveliness, curiosity, and the enjoyment of work ... (where) children do not accept authoritarian attitudes and are able to give and sustain arguments. They are not afraid to state their opinions in front of others. In Step by Step classrooms, you feel like you are in a lively home. This is important for future citizens.

The ministry representatives also demonstrated strong support and a sophisticated understanding of the family involvement component. One representative, for example, referred to parent associations as "...the body and soul of the program." Through their own words, respondents have consistently demonstrated that they have developed a deep and personal understanding of the program, its potential, and its impact.

The Ministries' Contributions to Step by Step. In addition to ministry representatives' attendance and participation in meetings, conferences, and training sessions, ministries of education have provided Step by Step programs in all four countries with substantial financial, policy, and promotional support.

Financial support. Ministry representatives reported that Step by Step programs have received direct and/or in-kind contributions. As mentioned earlier, in Romania the Ministry of Education pays the salary of an additional teacher in Step by Step classrooms. Further, the ministry donates a variety of hygiene supplies to be used in the kindergartens. In Ukraine the state provides an allotment for each child in Step by Step kindergartens just as it does for those in traditional state-run programs. These per-child allotments usually cover facilities, supplies, and nutrition costs. In Bulgaria and Kyrgyzstan the ministries of education pay teachers' salaries when they attend Step by Step training. Such financial aid serves

to underwrite some of the cost of disseminating the model, since interested teachers do not have to lose income in order to learn the methodology.

Policy support. Respondents reported that the ministries have provided programs with policy support in a number of ways, including permissions, waivers, and contracts that are necessary to enable the program to operate smoothly. For example the Kyrgyz ministry now offers teachers credit for career advancement when they attend Step by Step workshops. This official authorization enables teachers to change their professional classification, much like a step increase within a salary structure.

Perhaps the most significant way ministries support Step by Step programs is by granting them official status. Such recognition indicates the ministry's official acceptance of the program as a viable, alternative educational approach. At the same time, it also opens doors for programs, providing them with the independence and resources they need to broaden the scope of their services. Currently, three of the four countries in our study have been granted such status: Bulgaria, Kyrgyzstan, and Romania. Ukraine, the only exception, is still considered an experimental program, which limits Step by Step's ability to expand. While Step by Step enjoys a positive relationship with the Ministry of Education in Ukraine, one ministry representative indicated that former expansion efforts were the source of some difficulty. Specifically, expansion without ministry permission created tension between the former Step by Step director and the ministry. The respondent also reported that with the hiring of a new Step by Step director, the relationship between the ministry and the program has been restored.

Promotional support. Ministries of Education also have begun to take an active role in advocating for and promoting the program. For instance representatives from the Bulgarian ministry meet regularly with Step by Step country team members to plan expansion efforts; they also connect interested teachers and administrators with the program. Similarly, ministry representatives at the national and local levels have disseminated information about the program by talking

about Step by Step on the radio and television, writing papers to promote the approach, and organizing roundtable discussions.

Step by Step's Impact on Education. In all of the interviews, respondents described the substantial support that the ministries have offered Step by Step programs. At the same time, respondents clearly articulated the many ways that Step by Step has contributed to the quality of education for young children.

Respondents reported that the Step by Step philosophy is aligned with ministries' current educational policies. However, Step by Step has gone well beyond the abstract ideas of democratic education, by translating these ideas into a methodology which teachers can and do implement. As a result, the presence of Step by Step has been a catalyst to stimulate education reform. A Bulgarian ministry official aptly remarked that the program has given them "... the ability to apply a different model of education that has enriched the existing educational system."

Respondents offered many specific examples of the program's impact on education. In Romania, for instance, teachers have adopted qualitative rather than quantitative methods of assessing young children. "In its adoption of an evaluation record for individual children, Step by Step has abolished quantitative assessments based on grades and has become an excellent model and a stimulant (for education reform)."

The ministry representative from Bulgaria reported that teachers have incorporated the pedagogy of learning through play, creative imagination, and critical thinking, which is "the foundation of tolerance and democratic practices." The respondent from Ukraine noted that the real strength of Step by Step lies in the educational environment it creates, and in its teaching methods. The program "...creates new possibilities for influencing the family and realizing democratic principles." According to one Ukrainian respondent, Step by Step accomplishes its goals by providing materials, texts, and seminars in Ukraine and in setting a good example for teacher education in a program that "...supports democratic principles in schools."

Ministry representatives agreed that the positive impact of Step by Step extends beyond the classroom. In Kyrgyzstan, for example, the ministry has adopted and extended Step by Step's approach to family involvement. To ensure broad dissemination about the family involvement component, the ministry has distributed Step by Step materials to every kindergarten in the country.

Institutions of Higher Education

In response to the growing need for partnerships with higher education, CRI developed a faculty initiative to introduce potential partners to the program's philosophy and methods. First launched as international seminars, these sessions offered university and pedagogical institute staff with courses, related support materials, and experience designing interactive teaching methods. An expected outcome of this initiative was that the Step by Step methodology would be incorporated into the ongoing work of higher education in a variety of ways. Below we discuss the extent and nature of this initiative as well as some of the unique features of the collaboration between Step by Step and institutions of higher education.

Extent of the Initiative. Our data revealed that the Step by Step program in Ukraine has established the strongest and most extensive ties with higher education, reporting relationships with 117 faculty members from 22 preservice institutions and 6 retraining (inservice) institutions. (See Table V.5.) Like Ukraine, Kyrgyzstan has established ties with both preservice teacher education and retraining institutions, whereas Bulgaria and Romania have focused their energies on preservice. In fact, all four countries have formed affiliations with higher education and, in the case of Romania, with pedagogical high schools as well. (See Appendix IV for a list of institutions of higher education involved in the initiative.)

Table V.5: Step by Step Collaboration with Teacher Training Institutions

	Bulgaria	Kyrgyzstan	Romania	Ukraine
Teacher Training Institutions	5	9	20	22
Teacher Retraining Institutions	0	2	0	6

Types of Ongoing Collaboration. One way that the ongoing collaboration between Step by Step and institutions of higher education is evident is through the placement of student teachers in Step by Step classrooms. In Ukraine, as many as 1,064 student had practica experiences in MTSs during 1998. Like Ukraine, Bulgaria placed large numbers of student teachers in MTSs. Because institutions of higher education have developed formal institutional agreements with MTSs in Bulgaria, these sites provide opportunities—beyond the practica—for students to observe child-centered classrooms in conjunction with their coursework. The other two countries in the study, while placing relatively fewer numbers of students in Step by Step classrooms, still had impressive figures. Romania placed 420 student teachers in Step by Step and Kyrgyzstan placed approximately 280 students.

The collaboration between Step by Step and institutions of higher education has had an impact in another important way, namely in the introduction of new courses about Step by Step methodology. The development of new courses for credit serves as a kind of bellwether because it is such a major undertaking. Not only does it demand substantial amounts of time and energy on the part of faculty; developing new courses also requires commitment.

In Bulgaria, Kyrgyzstan, and Ukraine, more than two-thirds of the faculty trained in Step by Step's philosophy and methods have introduced new courses about the program's methodology; in Romania, up to one third of the faculty have introduced new courses. Since Romania has been engaged in the faculty initiative for a shorter period of time, the difference in the numbers is not surprising.

In addition to the widespread involvement of institutions of higher education, there is also evidence that Step by Step is permeating the education system. A closer look at Bulgaria yields some interesting examples. In Bulgaria, institutions of higher education now offer a certification program in Step by Step methodology. In addition to this 100-hour elective program, faculty have organized roundtables for students and created professional networks focused on Step by Step methodology.

STAGING BROADER COMMUNITY INITIATIVES

Family Advocacy

We have already seen that families play an active role in Step by Step kindergartens. (See Table III.2.) In fact, one hundred percent of the kindergarten directors reported that families volunteer in the classroom as well as participate in a range of other program-related activities, such as governance.

Families have also served as strong supporters as they advocate on behalf of the program to town officials, members of local education authorities, business leaders, and occasionally ministries of education. Data from kindergarten directors revealed that family advocacy focused on issues directly related to children and their education. (See Table V.6.) For example, families in 17 of the 20 kindergartens advocated for increasing Step by Step enrollment. Twelve kindergartens reported family advocacy efforts to expand the program into primary schools, and in eleven kindergartens, families advocated for additional financial support for the program. Families have also advocated for other issues such as space, financial support, and licensing.

Such advocacy is not surprising since it is the kindergarten that has been the galvanizing force around which families initially organized. These efforts do suggest, however, that families' energies and efforts could be mobilized to address social problems beyond Step by Step. In fact, kindergarten directors indicated families are already contributing to wider community efforts. Already parents'

associations donate food, clothing, and toys to families in need. They have organized clinics at which doctors and dentists donate their time for the entire neighborhood. In Ukraine, families created “weekend programs” for Roma and Tatar children and for young mothers of children too young to attend kindergarten.

**Table V.6: Patterns of Family Advocacy
on Behalf of Step by Step**

	Bulgaria	Kyrgyzstan	Romania	Ukraine	Total	
	# Yes n = 5	# Yes n = 5	# Yes n = 5	# Yes n = 5	# Yes n = 20	% Directors Reporting Types of Parent Advocacy
Space Needs	2	2	3	2	9	45
Retention	1	2	5	1	9	45
Financial Support	3	1	5	2	11	55
Increased Enrollment	5	3	5	4	17	85
Licensing	3	—	2	2	7	35
Rules and Regulations	—	—	—	—	—	—
Expansion of Program Services	4	3	2	3	12	60
Advocacy to Traditional Kindergartens	2	2	3	1	8	40
Advocacy to Primary Schools	4	3	5	3	15	75

These reports from kindergarten directors clearly suggest that families are gaining experience and skills that would enable them to address broader community issues. Moreover, Step by Step kindergartens appear ready to provide both the impetus and support to carry out such community development initiatives.

Community Involvement and Needs

We have discussed how family members advocate for Step by Step in the community; it is also the case that the community is actively involved in Step by

Step. Community members were reported to participate as classroom volunteers in 70% of the kindergartens (Table V.7). This extensive participation in the heart of Step by Step classrooms demonstrates an important commitment to the program and mirrors the very high participation of parents as classroom volunteers.

Community members also contribute to the physical facilities of Step by Step kindergartens. They repair and maintain kindergarten facilities in 19 out of 20 kindergartens (95 percent). They also donate classroom and building supplies (60 percent) and build outdoor equipment (50 percent). These contributions to the physical plant are significant at a time when the state has not been able to adequately fund the maintenance of building facilities.

It should be noted that the distinction between “family member” and “community member” is not always clear. At times, when the family relationship is quite distant, their contributions may have been reported as that of a community member. At other times, family members have roles in community organizations and act in these community roles to advocate for Step by Step. For example, one family member was a member of the City Council and advanced the interests of Step by Step in that arena. This blurring of roles notwithstanding, it is clear that community members offer tremendous support to Step by Step and that the program has attracted a wide circle of friends.

**Table V.7: Patterns of Overall Community Involvement
in Kindergarten Activities**

	Bulgaria	Kyrgyzstan	Romania	Ukraine	Total	
	# Yes n = 5	# Yes n = 5	# Yes n = 5	# Yes n = 5	# Yes n = 20	% Kindergartens
Participate in the classroom	4	4	3	3	14	70
Organize events	2	5	3	2	12	60
Build outdoor equipment	3	2	3	2	10	50
Make furniture & materials	1	4	4	0	9	45
Do clerical work	2	3	2	2	9	45
Repair and maintain facility	5	5	5	4	19	95
Help raise funds	1	2	2	1	6	30
Contribute cash	1	3	2	1	7	35
Donate classroom supplies	3	3	3	3	12	60
Donate building supplies	3	3	3	3	12	60

The extent to which families and community members can extend their efforts to address the needs of the broader community will depend, in part, on the breadth of the vision of kindergarten staff. It also requires a deep understanding of the social, economic, and health needs within their communities.

Data collected from the KDQ indicated that kindergarten directors are keenly aware of their community's needs. As shown in Table V.8, kindergarten directors identified six distinct areas of need. Of these six categories, four were mentioned by at least 60 percent of the directors as priorities—health services, services to the elderly, goods and services for low-income families, and adult education. This breadth of vision suggests some sophistication in their understanding of their communities. Further, key social indicators corroborate their insights. For

example, every kindergarten director identified health services as the most critical need in their community. Such health needs are clear, especially when examining the rates of infant mortality (per 1,000) in Bulgaria 12.7; Kyrgyzstan 38; Romania 22; and Ukraine 24.¹

**Table V.8: Critical Needs for Community Service
Identified by Kindergartens**

	Bulgaria	Kyrgyzstan	Romania	Ukraine	Total	
	# Yes n = 5	# Yes n = 5	# Yes n = 5	# Yes n = 5	# Yes n = 20	% Directors Indicating Services Needed
Health Services	3	5	4	4	16	80
Services to the Elderly	1	5	5	4	15	75
Goods and Services for Low-Income Families	3	5	5	2	15	75
Adult Education	2	5	4	2	13	65
Services to People with Disabilities	0	5	4	3	12	60
Workforce Development	1	2	2	0	5	25

Kindergarten directors repeatedly expressed a willingness to address these issues, but cited lack of resources as the major obstacle. If they had additional resources, directors indicated that their programs could serve as community centers to distribute materials and services.

While many programs are just beginning to explore possible solutions to community problems, others are already engaged in activities that address the complex social, educational, and economic needs of their communities. Some programs, for example, have made arrangements with local companies to provide food and free medical care for low-income families. They have also engaged in community advocacy, by publishing articles in local newspapers and circulating reports to other media outlets.

¹ UNICEF (1998). *State of the World's Children 1999: Education* [Statistical report]. Retrieved January 25, 1999 from the World Wide Web: <http://www.unicef.org>

Kyrgyzstan, in particular, has made considerable progress in initiating activities that benefit not only the kindergarten, but the broader community. At three of the five kindergartens studied, free medical services were provided to neighborhood residents. Events were organized to distribute clothing and books to children with disabilities; other activities were designed to meet the needs of the elderly, who have been consistently identified as being in a precarious financial situation. Further, these directors revealed an entrepreneurial orientation as they suggested the possibility of opening a canteen to sell bread and ice cream, or providing services, ranging from sewing to computer services.

Programs' ability to use their entrepreneurial skills to address community needs is clearly seen in the following example: A Kyrgyz grandmother lent a cow to the local Step by Step kindergarten. In addition to receiving the nutritional benefit from the milk, children also had opportunities to learn about animal husbandry. The kindergarten also used the enterprise to invite additional family and community involvement. As a result, families agreed to cover the costs for the cow's food supply. The program will eventually sell the cow's milk to neighborhood residents; the revenue will be used to buy another cow.

While the program has encountered some obstacles, the example vividly illustrates how Step by Step has been able to use their entrepreneurial skills in order to respond to the comprehensive needs of children, families, and communities.

SUMMARY

The sustainability of the Step by Step program has been demonstrated in many ways. One mark of sustainability is that the level of child achievement is at least as high as the achievement of children in traditional programs and its positive impact on children and families has been retained, even with the rapid expansion of the program. Furthermore, there is increasing demand for the extension of the types of services that are offered and expansion in the number of kindergartens.

Step by Step has also made considerable progress in developing its institutional capacity as evident in the attainment of NGO status in three of the four countries. By attaining NGO status, programs are gaining independence from the regional foundations by diversifying their funding base and developing financial management practices. The strength of the Step by Step's organizational infrastructure is also evident in the Model Training Sites, a network that supports and disseminates Step by Step methodology. The effectiveness of this network is indicated by the high quality of the expansion classrooms that we observed.

In only four years, Step by Step has already been integrated into key education systems. An indication of Step by Step's impact is the fact that in all four countries, ministries of education have provided Step by Step programs with substantial financial, policy, and promotional support. Institutions of higher education have also embraced the Step by Step methodology. As a result, large numbers of student teachers are placed in Step by Step classrooms, new higher education courses about Step by Step methodology have been introduced, and, in some cases, these new courses of study lead to certification in Step by Step pedagogy.

It seems likely that the strength of family involvement in Step by Step has led to participation of the wider community. Their knowledge of the program is coupled with their investment which is demonstrated in a number of ways ranging from active participation in the classroom to maintenance and repair of the physical plant. Taken together, this constellation of factors strongly suggests the program's ability to become sustainable.

Our data also suggest that the program can be used to stage broader community-based activities. Community members already participate actively in the program. In turn, many programs are already exploring possible solutions to community problems; others are actively engaged in activities that address the complex social, educational, and economic needs of their communities. However, all programs underscore the need for additional resources in order to widen their purview and to address broader social needs.

CHAPTER VI: CONCLUSIONS

This section discusses the conclusions of our two-year evaluation of Step by Step in four countries—Bulgaria, Kyrgyzstan, Romania, and Ukraine. The overarching purpose of the evaluation was to gain a better understanding of the role of child-centered learning strategies in creating democratic, collaborative behaviors at the local level for newly independent states of Eastern Europe and Central Asia. Using classroom observation tools, child assessments, surveys, and interviews, these data provide a broad view of Step by Step's impact on children, parents, and communities.

QUESTION 1: ARE THE EDUCATIONAL PERFORMANCE AND DEVELOPMENTAL PROGRESS OF STEP BY STEP CHILDREN COMPARABLE TO THOSE OF CHILDREN IN TRADITIONAL PROGRAMS?

Our answer to this question is an unequivocal “yes.” Across all countries and on every dimension we found that Step by Step children perform as well as, or in some cases exceed, the performance of children in traditional programs. Overall, the academic benefits of Step by Step are most evident in the realm of mathematics, with significant effects favoring Step by Step in three of the four countries. Such findings might reflect the emphasis on exploration in Step by Step classrooms. As children experiment with objects and quantities in different activity centers, they have opportunities to construct notions of relative quantity and, when teachers join them in their explorations, there are many occasions when discourse about mathematical concepts can occur.

Some differences favoring Step by Step were also seen in literacy learning, including receptive language. At first glance these findings are somewhat surprising since formal literacy instruction is emphasized in traditional programs. However, these findings are more understandable when viewed in light of the nature of teacher-child interaction in Step by Step classrooms, specifically its emphasis on extended conversations, daily book readings, and writing activities.

Overall, our assessments of creativity did not yield significant differences between children in Step by Step programs and children in traditional programs. An exception to this finding was in the *Unusual Uses* activity. Results here indicated greater creativity among Step by Step children, particularly in their ability to think in flexible ways. Such a finding provides evidence that Step by Step classrooms are, in fact, more effectively nurturing children's creativity.

Finally, when we inspect frequency distributions for children from the two types of programs, we consistently find that Step by Step programs seem to provide greater support to children who enter with less well-developed academic skills. This finding suggests that Step by Step's child-centered approach enables teachers to implement a program that is responsive to children's individual needs, rather than one that is dictated by a set curriculum. Since one of the critical components of Step by Step is individualizing the curriculum for children, our data indicates that teachers are making such curricular adjustments skillfully.

QUESTION 2: WHAT DEMOCRATIC CONCEPTS ARE CHILDREN LEARNING IN STEP BY STEP CLASSROOMS (E.G., MAKING CHOICES, TAKING INITIATIVES, VALUING INDIVIDUAL EXPRESSION, AND CONTRIBUTING AS A MEMBER OF A LEARNING COMMUNITY)?

If one accepts the basic premise of this report—that high-quality, child-centered early childhood practice is consistent with democratic principles—then our results provide overwhelming evidence that children in Step by Step programs in all four countries are learning and playing in environments that promote democratic behaviors and ideals. The magnitude of the difference between the two programs, apparent from classroom observation data, points to the enormous distance that Step by Step teachers have traveled on their journey to creating democratic schools.

Overall, our findings reveal that Step by Step teachers are implementing classroom practices that consistently engage children in appropriate decision making around their own learning. Step by Step teachers accomplish this in a

number of ways—by creating a climate where children help to establish a vital classroom community, and by encouraging children’s burgeoning social and intellectual independence. By and large, traditional kindergartens are organized around a contrasting principle—one that places most of the responsibility for learning in the hands of the teacher. Most often the curriculum in such programs requires children to move together through academic exercises with far fewer opportunities for choice and self-direction. Consequently, children in traditional classrooms are considerably more passive in the learning process when compared with their peers’ active learning experiences in Step by Step.

Step by Step has transformed the teaching and learning environment in kindergartens in a remarkably short time. Teachers have moved from teacher-directed and authoritarian practices to creating environments for active, independent learners. This achievement of Step by Step is even more impressive when considered along with the child learning outcomes in mathematics, literacy, and creative thinking. What could explain such a transformation in teaching methods and values? Perhaps the answer lies in the comprehensive nature of Step by Step’s methodology. By design, the Step by Step model has an impact on teacher-child interaction, curriculum goals, pedagogical methods, the pace and balance of learning activities, the selection of materials, and the organization of the environment. Clearly, when implemented together, these practices are mutually reinforcing and powerfully synergistic, yielding a climate that promotes democratic values.

QUESTION 3: HOW DO STEP BY STEP TEACHERS AND TEACHERS IN TRADITIONAL CLASSROOMS DIFFER WITH RESPECT TO THEIR APPROACH TO TEACHING?

We have already discussed the dramatic differences in classroom practices between teachers in Step by Step and those in traditional programs. Step by Step teachers, more than their counterparts, consistently encouraged children’s initiative and questioning. Therefore, it is not surprising that Step by Step teachers, unlike traditional teachers, are more comfortable with children’s inquiry. In other words, Step by Step teachers do not feel that they must know “the right

answer” before they allow children to experiment and explore. Instead they have made the shift from *teacher as expert* to *teacher as learner and facilitator*—an important transition for teachers carrying out a child-centered curriculum. The predictability of the scope and content of the traditional curriculum provides a measure of security: questions are anticipated; right answers are available; and being right is valued. With child-centered practice, teachers must see themselves as learners who are experts in knowing *how* to find out. In this way, teachers are modeling important notions: curiosity is valued; exploration brings new knowledge; and learning is lifelong.

Our findings also indicate that the theme of continuous learning extends beyond classroom walls. Step by Step kindergartens have substantially altered their administrative structures so that teachers have time to plan together and learn from one another as well as from their supervisors. They also have more opportunities to attend workshops on topics of their choice. The emphasis on continuous learning in Step by Step programs appears to have acted as a catalyst that has opened up decision making in unanticipated ways. Data from teachers and kindergarten directors underscores that Step by Step teachers have become decision makers not only about curriculum but also about the ways that kindergartens operate. Greater access to decision making and power, characteristic of democratic institutions, seems to be taking hold. This evidence of systemic change is likely to contribute to Step by Step’s ability to be sustainable.

The fact that Step by Step teachers hold academic goals similar to teachers in traditional programs is also likely to contribute to the sustainability of the model. In each of these countries there is a strong national commitment to developing basic skills in preschool programs. If Step by Step teachers had neglected to meet these goals, the program would quickly become marginalized. But Step by Step teachers retained their country’s academic standards, thus improving the likelihood that Step by Step will become one of the major preschool models.

Our findings also revealed an interesting discrepancy between teachers’ democratic practices in the classroom and their underlying beliefs about their role.

Namely, while teachers actually share power with children in their classrooms, they also retain the belief that teachers should be the primary locus of control. One explanation for this apparent contradiction between behavior and belief may be the lasting impact that early schooling has on teachers' belief system. Because we know that experiences with early schooling are formative, exposure to Step by Step's participatory classrooms and schools may have an unexpected benefit. Such early experiences can help to create a fundamental and long-lasting commitment to democratic beliefs and practices in this generation of children.

QUESTION 4: TO WHAT EXTENT ARE PARENTS, EXTENDED FAMILY, AND COMMUNITY MEMBERS ACTIVELY ENGAGED IN THE IMPLEMENTATION OF THE STEP BY STEP PROGRAM?

Family involvement is, perhaps, Step by Step's most extraordinary achievement. Initially, host countries were skeptical about inviting family members into the program even in a limited way—as classroom volunteers. Breaking down the well-established boundaries between the roles of parents and teachers involved exploring new and uncharted territory. Yet, these first steps have led to an impressive range of family involvement activities and the welcomed presence of parents in Step by Step kindergartens. In fact, 100 percent of the kindergartens in our sample now have active parent associations which are involved in the governance of the kindergarten.

The nature and extent of family involvement has been corroborated by all of our key data sources: kindergarten directors report it; our data collectors observed it; and ministries of education remarked most favorably about its impact. What started as primarily a classroom volunteer initiative has evolved into a way of working that values the participation of families and community members. It is clear that families and community members have contributed extensively to Step by Step kindergartens; there is also reason to believe they have been enriched by their participation. Kindergartens—with their access, openness, and shared decision making—have created a climate which influences the many volunteers who cross their thresholds. These adults, interested in the well-being of their

children, grandchildren, and neighbors are engaging with democratic practices in dynamic and concrete ways.

QUESTION 5: WHAT IS THE POTENTIAL FOR STEP BY STEP SCHOOLS TO BECOME CENTERS FOR STAGING BROADER COMMUNITY-BASED ACTIVITIES SUCH AS ELDER CARE, HEALTH CARE, ADULT EDUCATION, OR DISTRIBUTION CENTERS FOR GOODS AND SERVICES?

Tackling broad social issues requires that Step by Step families and kindergarten staff alike have a deep understanding of the social, economic, and health needs within their communities. Interviews with kindergarten directors revealed their keen awareness of broader social concerns and their willingness to serve as a hub for community-wide programs. However, lack of resources was cited as the major obstacle.

While many programs are exploring possible solutions to community problems, others have already initiated activities to address the complex social, educational, and economic needs of their communities. Kindergarten directors reported that programs are engaged in a range of community efforts—from donating goods to families in need to organizing health clinics for neighborhood residents. Further, we found evidence of emerging entrepreneurial skills among kindergarten directors that could be used to stage initiatives that benefit not only the program, but the broader community as well.

QUESTION 6: TO WHAT EXTENT CAN THE INTERESTS AND ENERGIES OF ENGAGED PARENTS ALSO BE DIRECTED TOWARDS OTHER COMMUNITY DEVELOPMENT INITIATIVES?

As noted earlier, families play an active role in Step by Step. This role has led parents to advocate on behalf of the program to town officials, members of local education authorities, business leaders, and occasionally ministries of education. Our data suggest that through these advocacy efforts, families are gaining the experience and skills needed to turn their sights to broader community issues; that

is, their active involvement in kindergartens has served as a galvanizing force for extending their efforts to wider community issues. Furthermore, Step by Step kindergarten directors reported that with additional resources, the program can provide both the impetus and support to carry out such community development initiatives.

QUESTION 7: CAN THE STEP BY STEP PROGRAM BECOME SUSTAINABLE (ECONOMICALLY AND IN PRACTICE)?

The sustainability of the Step by Step program has been demonstrated in many ways. One mark of sustainability is that the level of child achievement is at least as high as the achievement of children in traditional programs and its positive impact on children and families has been retained, even with rapid program expansion. Furthermore, there is increasing demand for the extension of the types of services offered and expansion in the number of kindergartens.

Step by Step has also made considerable progress in developing its institutional capacity, as indicated by the attainment of NGO status in three of the four countries. By attaining NGO status, programs are gaining independence from the regional foundations by diversifying their funding base and developing financial management practices. The strength of the Step by Step's organizational infrastructure is also evident in the Model Training Sites (MTS), a network that both supports and disseminates Step by Step methodology. In just a 10-month time period, MTSs trained more than 3,000 teachers and administrators and reached more than 2,000 parents.

Key education systems have also embraced the Step by Step methodology. In all four countries, ministries of education have provided Step by Step programs with substantial financial, policy, and promotional support. Institutions of higher education have also integrated Step by Step methodology into their ongoing work. As a result, large numbers of student teachers are placed in Step by Step classrooms, new higher education courses about Step by Step methodology have been introduced, and, in some cases, these new courses of study lead to

certification in Step by Step pedagogy. Taken together, this constellation of factors strongly suggests the program's ability to become sustainable.

What is evident is that the program appears to have avoided many of the common problems that accompany an innovation that goes to scale. The quality of the program has been retained, even with its rapid expansion. Implementation has encountered little of the resistance one might expect from key institutions. In fact, Step by Step programs have enlisted the active support of the government as well as institutions of higher education. While there is expected variation among the four countries in our sample, it is clear that even after a brief four-year period, Step by Step is steadily being woven into the fabric of their unique educational systems.

Much of the program's success in developing a sustainable model can be attributed to two factors. First, the model was designed to engage a host of individuals in the decision-making process. Parents, ministries of education, leaders in teacher education, country teams, and kindergarten staff have not only helped to shape the program's current implementation; they are also well-poised to craft its future.

Second, the content of the program itself—education for democracy and learning—has struck a chord with the social forces at play. In these newly independent states, many policy makers, families, and educators are committed to building a democratic society. The social momentum initiated at the beginning of the decade appears to have found an outlet, as well as guidance, in Step by Step. Just as social energies and commitments have enriched Step by Step—the program, in turn, has strengthened the capacity of society to reach its goals.

Appendix I:
Description and Psychometric Properties of Instruments

DESCRIPTION AND PSYCHOMETRIC PROPERTIES OF INSTRUMENTS

What follows are descriptions of the instruments used in the Step by Step evaluation, including their psychometric properties. Those developed by the research team are included in Appendix II. Commercial instruments are available from their publishers.

CLASSROOM INSTRUMENTS

Adapted Early Childhood Classroom Observation (ECCO)

The research team adapted the Early Childhood Classroom Observation (ECCO), an instrument developed by the National Association of the Education for Young Children (NAEYC) for use in program evaluation. The adaptations strengthened the scoring structure of the instrument for use as a research tool. It is organized into five sections: 1) *Interactions Among Staff and Children*, 2) *Curriculum*, 3) *Physical Environment*, 4) *Nutrition and Food Service*, and 5) *Family Participation*. Within these five sections are items to be scored as *not met*, *partially met*, or *met*. Related to most items are indicators representing observable behaviors which are scored on a 0/1 scale, depending on whether the indicator was present during the observation session. Trained data collectors observed in Step by Step initial and expansion classrooms as well as traditional classrooms for a minimum of three hours.

Properties of the ECCO

Strong internal consistency characterized the three main sections of the instrument: *Interactions Among Staff and Children* (Cronbach's $\alpha = .90$), *Curriculum* (Cronbach's $\alpha = .94$), and *Physical Environment* (Cronbach's $\alpha = .86$). *Nutrition and Food Service* and *Family Participation* were one-item scales, so our capacity to assess their reliability within the study design was limited. Nevertheless, the indicators raters used to judge each variable were

reasonably internally consistent (Cronbach's $\alpha = .72$ for *Nutrition and Food Service* and Cronbach's $\alpha = .86$ for *Family Participation*), suggesting that raters were using a unitary dimension to rate these items. ECCO scales were correlated in expected directions with the beliefs of the corresponding classroom teachers (see report of correlations in the Teacher Beliefs and Practices Survey section). The ability of the adapted ECCO scales to discriminate in predicted directions between the conditions suggests their validity for this and similar applications.

Teacher Beliefs and Practices Survey (TBPS)

The Teacher Beliefs and Practices Survey (TBPS) was created to gather data from teachers in observed classrooms. The instrument contained 53 items which were organized into four sections: 1) *Teacher/Classroom Background Information*, 2) *Parent Involvement*, 3) *Beliefs and Practices*, and 4) *Goals for Children*. Teachers were asked to rate the frequency of different types of parent involvement in their classrooms using a seven-point scale. This scale provides opportunities for teachers to rate the frequency on a scale from never to every day. In addition, teachers were asked to rate their perception of their role, and their beliefs about effective pedagogical practices and child development using a four-point scale that presented a range from strongly disagree to strongly agree. Finally, respondents rated a set of assertions regarding learning goals for children on a four-point scale that offered a range from not at all important to very important.

Properties of the TBPS

Questions in the last two sections—beliefs and practices and goals for children—were divided and scored within four subscales: *Democratic Beliefs*, *Teacher as Locus of Control*, *Basic Skills*, and *Teacher as Active Learner*. The internal consistency of the *Teacher as Active Learner* scale was modest (Cronbach's $\alpha = .59$) while *Basic Skills* (Cronbach's $\alpha = .80$), *Democratic Beliefs* (Cronbach's $\alpha = .76$), and *Teacher as Locus of Control* (Cronbach's $\alpha = .68$) had higher internal consistency, within the range of what is considered

psychometrically acceptable. Supporting their validity, relevant TBPS subscales had small to moderate, significantly positive correlations with corresponding ECCO scales from the same teachers' classrooms. *Teacher as Active Learner* correlated .23 with *Interactions among Staff and Children*, .29 with *Curriculum*, .48 with *Physical Environment* and .35 with *Family Participation*. *Democratic Beliefs* correlated .29 with *Interactions among Staff and Children*, .19 with *Curriculum*, .33 with *Physical Environment* and .24 with *Family Participation*. The ability of *Teacher as Active Learner* and *Democratic Beliefs* to discriminate between the conditions in expected ways suggests their validity as well.

CHILD ASSESSMENTS

We selected child assessment instruments in the domains of literacy, numeracy, and creativity, according to several predetermined criteria. Instruments were selected to be developmentally appropriate for the children in our sample. In addition, they were individually administered instruments that were untimed and had only approximate guidelines for duration. We also selected instruments for which scoring was relatively short and simple or, if possible, concurrent with the test administration. Given the young age of children to be assessed, we created a test battery that did not exceed two hours per child. Also, for this reason, we selected assessment instruments for which we could use subtests in some cases and which we could adapt for reasons of timing, cultural context, and language of the children to be tested.

The instruments used for individual child assessments were: the Test of Early Mathematical Ability (TEMA-2); the Emergent Literacy Assessment (ELA); a receptive language measure that is an adaptation of the Peabody Picture Vocabulary Test (PPVT); and two activities from the Torrance Tests of Creative Thinking.

Test of Early Mathematics Ability, Second Edition (TEMA-2)¹

The TEMA-2 is a commercially available instrument, specifically designed to assess the mathematical thinking skills of young children (three years and older) who may not yet be readers. It measures informal mathematics awareness in the areas of relative magnitude concepts, counting skills, and calculation. It also assesses children's abilities in formal mathematics with respect to their knowledge of conventions, number facts, calculation skill, and base ten concepts. Formal knowledge is that which is generally taught in the context of schooling. The TEMA-2 places a greater number of informal items earlier in the test, whereas items that measure formal mathematics abilities are more prevalent later. The administration time is 20-30 minutes.

TEMA-2 Properties

In previous studies test reliability was determined by measures of internal consistency and standard error of measurement.² Coefficient alphas for each age level were in the acceptable range of .92-.96. There was no information on the test's test-retest reliability, but instead information is given from the TEMA administered to four and five year olds with a reliability coefficient of .94.

The TEMA-2 is the second edition of the TEMA, and contains an additional 15 test items in order to extend the test's applicability to younger children. Because of this, the authors of the TEMA-2 correlated scores between the TEMA and items on the TEMA-2. The resulting coefficient was .93. They then used this value to extend the TEMA's concurrent validity coefficients with two tests: 1) Diagnostic Achievement Battery: .40 and .59; 2) Quick Score Achievement Test (math subtest): .46.

¹ Ginsburg, H.P. & Baroody, A.J. (1990). *Test of Early Mathematics Ability, Second Edition*. Austin, TX: PRO-ED.

² Kramer, J.J. & Conoley, J.C., Eds. (1992). *The Eleventh Mental Measurements Yearbook*. Lincoln, NE: The Burros Institute.

Emergent Literacy Assessment (ELA)³

The ELA is an assessment tool developed by Education Development Center, Inc. (EDC) that builds on a body of research and practice on the skills and abilities that are good predictors of later literacy fluency, reading, writing, speaking, and listening. This portion of the child assessment was designed to test children's progress toward literacy development. *The Print Concepts and Reading Comprehension* task was created specifically for this project.

ELA administration was divided into four sections: 1) *Letter Identification*, 2) *Emergent Writing*, 3) *Early Reading*, and 4) *Print Concepts and Reading Comprehension*. The purpose of each task is as follows:

- The Letter Identification task assessed children's knowledge of the letters of the alphabet and allowed children to display their knowledge by producing responses or by identifying letters after the examiner named them.
- The Emergent Writing task asked children to display their understanding of the structure of written language and how it is written. This task, which contained progressively more difficult activities, was scored based on children's directionality and conventionality in the use of letters to represent sounds.
- The Early Reading task presented children with a carefully selected series of words, beginning with their own names, and progressing through a list of words of increasing difficulty.
- The Print Concepts and Reading Comprehension task assessed the child's mastery of basic print concepts such as directionality, title, and author. It also assessed their understanding of the text and their critical thinking skills by rating their responses to a set of questions presented at key points during the book reading. This task relied on text created for this evaluation for the wordless book *Where's My Monkey?* by Dieter Schubert.⁴

ELA Properties

Analysis of the internal consistency of the ELA scales provides evidence for their reliability. Internal consistency was very high for *Letter Identification* (Cronbach's alpha = .95), *Emergent Writing* (Cronbach's alpha = .92), and *Early*

³ The ELA was an adaptation of the Early Literacy Profile developed by David K. Dickinson and Carolyn Chaney, ©Education Development Center, Inc., 1998 with permission of the authors and publisher.

⁴ Permission for this adaptation and use of the book was obtained from Lemnisaat bv Publishers, The Netherlands. Schubert, D. (1987). *Where's My Monkey?* New York: Pint Books for Young Readers.

Reading (Cronbach's alpha = .96), and acceptable for *Print Concepts and Reading Comprehension* (Cronbach's alpha = .76).

Adapted Peabody Picture Vocabulary Test, Third Edition (PPVT-III)⁵

An adaptation of the PPVT-III was used as a part of the child assessment battery because of its utility as an assessment of receptive language for children who are not yet readers. It was used in this study as a more familiar assessment of early literacy ability and to work in conjunction with the ELA, which is a newly designed instrument. The PPVT-III is administered by showing the subject a set of four pictures. The child is then asked to find a particular picture in the array of four on the page. The words presented are of increasing difficulty. The final score is representative of the last word the child is able to identify. Standardized scoring of the PPVT-III is determined based on established norms within the language and country of testing. In this evaluation, however, adaptations were made to the PPVT-III. It was our goal to revise the tool during the course of several iterations in each of the five languages of children assessed (Bulgarian, Kyrgyz, Romanian, Russian, and Ukrainian) for the purpose of retaining the progressive difficulty of words. This process was begun at our four-country meeting in Bucharest and continued via subsequent communications. However, because of time constraints, it was impossible to refine the tool to the extent desired.

Properties of the PPVT-III

As reported in *The Eleventh Mental Measurements Yearbook*,⁶ the PPVT has the following reliabilities: .88-.96 alternate form; .92-.98 Alpha coefficient; .86-.97 split-half; .91-.94 test-retest. It has been correlated with age and with several other measures such as the Wechsler Intelligence Scale for Children (WISC) = .82-.92; Kaufman Adolescent and Adult Intelligence Test .76-.91; and Kaufman Brief Intelligence Test = .62-.82. However, the PPVT-III adaptation used in this study did not have the same psychometric properties as the standardized version because

⁵ Dunn, L.M. & Dunn, L.M. (1997). *Peabody Picture Vocabulary Test, Third Edition*. Circle Pines, MN: American Guidance Service, Inc.

⁶ Kramer & Conoley, *The Eleventh Mental Measurements Yearbook*.

it did not retain the characteristic of rigorously and consistently presenting words of progressively greater difficulty in each language. The adapted tool, as administered, was a test of general receptive vocabulary. Nevertheless, results of this adapted PPVT did correlate .578 with our second test of literacy, the ELA, suggesting the validity of the measure.

Torrance Tests of Creative Thinking (TTCT)⁷

The TTCT is designed to assess the important characteristics of creative thinking in subjects from kindergarten through adulthood. Although it is divided into two tests, one using figural representations and the other using verbal representations, we used only two activities from the verbal subtest of the TTCT: *Product Improvement* and *Unusual Uses*. In the *Product Improvement* activity, children were shown a toy prompt and asked to list ways that they could improve it to make it more fun to play with. With the second activity, *Unusual Uses*, children were asked to list novel ways to use a common object (a cardboard box). Together, the two activities were expected to take approximately twenty minutes to complete. Children's performance on the two subtests were scored on three scales: fluency, flexibility, and originality. The fluency score consisted of the number of viable responses generated by the child. The originality score was calculated based on a list of typical responses given by children. The flexibility score was calculated based on the number of different categories in which responses are generated. Unlike the other individual child assessments, the Torrance cannot be scored concurrently with administration. Research coordinators from each country scored the Torrance after all child testing was completed.

Properties of the TTCT

Previous research demonstrates strong psychometric properties of this instrument. The Torrance Tests maintain high inter-rater reliability with correlational coefficients ranging between .86 and .99, and test-retest reliability has been

⁷ *Thinking Creatively with Words*, E. Paul Torrance. 1984, copyright Scholastic Testing Service, Inc., 480 Meyer Road, Bensenville, IL 60106-1617.

reported to be as high as .93.⁸ Because of practical constraints, however, we used only two of the activities on the scale, which limits our confidence in the psychometric properties of our adaptation of this measure. The two activities demonstrated some internal consistency, since they were moderately correlated on both fluency (Pearson $r = .26$) and flexibility (Pearson $r = .27$). The fact that they later discriminated between the three conditions in expected directions suggests their validity as well.

PHASE II INSTRUMENTS

In Phase II of the evaluation, we sought to complement the six tools just described with instruments designed to gather more qualitative data about the nature of program implementation, its diffusion into key educational systems, and the organizational capacity of the country-level Step by Step programs.

Kindergarten Directors' Questionnaire (KDQ)

The Kindergarten Director's Questionnaire (KDQ) was designed to gather information on the overall nature of administrative practices in kindergarten since the inception of Step by Step. The 66 questions, which are both open-ended and forced choice, were developed to capture the nature and extent of participation of teachers, parents, and community members in the operation of the kindergarten since the adoption of the Step by Step model.

The instrument was organized into four sections: 1) *Background of Directors* 2) *Demographic Information About the Program* 3) *Relationships with Families* and 4) *Relationships with the Wider Community*. Directors completed the items on the questionnaire and their responses were treated confidentially. Once responses were returned to research coordinators, in-country researchers conducted follow-up telephone conversations and, in some cases, face-to-face meetings with respondents to clarify answers and probe for elaboration.

⁸ Kramer & Conoley, *The Eleventh Mental Measurements Yearbook*.

Participatory Results-Oriented Self-Evaluation (PROSE)

PROSE is a methodology designed to engage cross-hierarchical teams in a process to assess organizational capacity. It uses a method of discussion anchors paired with ratings by individuals to identify areas of high and low performance.

Designed by Beryl Levinger and Evan Bloom, this methodology has been used extensively with NGOs in many countries around the world.⁹ For this evaluation, we developed an instrument that contained 103 items organized into five critical capacity areas:

- Organizational Learning for Quality Control focused on factors that lead to program quality: the use of monitoring and evaluation to systematically track progress and assess impact, the use of evaluation information for program improvement, and the use of mechanisms to ensure equitable service to all populations.
- Teamwork focused on the degree to which program staff shares goals and responsibilities, exercises democratic principles, and encourages and respects initiative at all levels. This area also addressed meeting behaviors within the country teams and at the national level.
- Staff Development focused on the frequency and type of staff training, and the degree to which teachers, kindergarten directors and others have input into its content and evaluation. It also addressed the degree to which Step by Step methodologies, introduced at the country team level, are equitably disseminated to teachers at the local level.
- Sustainability focused on program sustainability with regard to institutional and political support, funding and resource management, cultural support and the ability to shape institutional values and influence policy to support the Step by Step methodology. This capacity area also examines the ability of the program to expand to other centers and the ability to forge meaningful alliances with other entities for sustainability.
- Innovation concentrated on the program's strategic capacities: its ability to adapt to and initiate changes in the external environment, modify objectives, and exercise creativity in searching for continual program improvement.

Each country research coordinator gathered a group of between five and seven members of each Step by Step country team to participate in this self-assessment process. Research coordinators from each country were trained in PROSE

⁹ Levinger (Education Development Center, Inc.) and Bloom (PACT) served as consultants on the project to assist in the development of an instrument tailored for Step by Step.

methodology and led the discussions, progressing systematically through discussion sets and their associated items, which were rated by individuals anonymously on a Likert scale. Scores for capacity areas reflected teams' level of agreement regarding the items contained in these subscales. While the ratings did not show the variability expected, those items with lowest means yielded interesting and informative data.

Program Implementation Survey (PI)

This instrument is directed at gathering information on how the program has been implemented in each country, and contains 39 quantitative and qualitative items. Completed by the Step by Step country director in consultation with other key members of the country team, the Program Implementation Survey assesses the infrastructure of the Step by Step program, the way it supports its kindergartens, and its collaborative effort with other educational institutions in the country. The survey is divided into three sections:

- Management and Organizational Structure probed teams about the staff, the program's status as an NGO and related challenges, and the resources available to the program.
- Support for Kindergartens focused on the type and frequency of training and technical assistance provided to kindergarten staff and parents. It also asks about the selection of Model Training Sites and the types of support they provide to Step by Step staff and the larger community.
- Efforts with Other Institutions asked about the reciprocal relationship that the Step by Step program has established with the country's Ministry of Education, Pedagogical Institutes, and Universities. It questioned the level and types of interactions and gathered evidence of the Step by Step program's transformative influence on their institutional infrastructure.

Ministry of Education Interview Protocol (MEI)

The interview protocol was designed to provide a semi-structured approach for learning about the impact of Step by Step from the perspective of key educational policy makers within all four countries. Consistent with the stated purposes of the evaluation, the protocol was also designed to gather data on the impact of the

program on educational policy and practice. The protocol was divided into three sections:

- The collaboration section focused on the nature and extent of the ministry of education partnership with Step by Step, including respondents' views of the working relationship.
- The Policy section included a series of probes regarding the degree to which Step by Step has made an impact on educational policies within each country. In order to place the discussion in a context, information was gathered about current educational challenges to Ministries and their priorities.
- The third and final section gathered information about the Future Vision of Education Reform in each country and respondents' perspective on the "goodness of fit" between the ministry's reform plans and Step by Step. Some avenues pursued in this line of questioning are thoughts on the training of teachers in a democratic society, the role of education reform in establishing a civil society, and the broader adoption of the Step by Step methodology.

Research coordinators conducted a two- to three-hour structured interview with representatives each of the Ministries of Education. Respondents were selected in consultation with Step by Step country teams and in all cases included a representative of the national Ministry of Education. Furthermore, in most countries other interviews were conducted with representatives from the local education authority. In addition to written analyses, interviews were audiotaped with the permission of respondents.

Acevedo, Karen

From: edchon [edchon@sigmanet.hn]
Sent: Tuesday, October 03, 2000 7:42 AM
To: Acevedo, Karen
Cc: 'CarmenIEQ'
Subject: Abraham's clearance

OK, this is what I've come up with;

Request that Abraham Zalzman arrive on or about Oct 18 through Nov. 4 to work Institutional Strengthening Coordinator to design, prepare and conduct on a variety of working sessions with EDUCATODOS and IEQ staff.

Working session #1 will work with new EDUCATODOS Director and the EDUCATODOS technical team and activities will include team building exercises, strengthening interpersonal relationships, and human resource management.

Working session #2 will be held with the 14 EDUCATODOS departmental coordinators to strengthening work in the field and activities will include exercises on team building, roles and responsibilities, consolidation of work groups, strengthening interpersonal relationships, techniques and strategies for promoting EDUCATODOS.

Working session #3 will be held with EDUCATODOS and IEQ staff to integrate both teams and include exercises on team building, strengthening workgroups and interpersonal relationships.

Carmen, do you have anything to add?????

Mary Ellen

10/18/00

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COUNTRY TEAM PROGRAM IMPLEMENTATION SURVEY

I. MANAGEMENT AND ORGANIZATIONAL STRUCTURE

1. How many professional staff do you have who support the adoption/continuation of Step by Step programs (birth to three, kindergarten, primary school, etc.)?
_____ number of professional staff
2. How many other administrative staff work with you to support Step By Step programs (e.g., accountant, drivers, etc.)?
_____ number of other administrative staff
3. Please provide the job titles of your staff, indicate what percentage of time he or she is employed by your program. Also indicate for each position whether the person is based at your central office or at another office. Be sure to list all Master Teacher Trainer positions separately as well as other job titles that are held by multiple people. The number of positions listed should equal the total number of people represented in questions 1 and 2.

Job Title	% of Time Employed by Program	Where Based?

4. How many professional Step by Step staff work in local kindergartens who are applying the Step by Step methodology? Include all professional staff regardless of who pays their salary.

Directors/principals: _____

Lead teachers: _____

Site managers/assistant teachers: _____

Family coordinators: _____

Other professional staff. Please
specify: _____

5. Describe the fee structure for Step by Step kindergartens and how it differs from traditional kindergartens.

6. Please describe the three most important goals your team has had for the Step by Step program in 1998.

7. As you think about the future, what goals do you think are most important? Why?

8. Is your Step by Step program an NGO?

☐ Yes ☐ No

If yes, when did you become an NGO? _____(date)

9. If your program is not an NGO yet when do you hope to achieve this status? _____

10. Whether or not your program is an NGO, please answer the following three questions (a, b, c).

(a) What were (will be) the three biggest challenges encountered in order to achieve NGO status?

(b) If you successfully overcame some or all of these challenges, please explain how.

(c) What are three major advantages to becoming an NGO?

11. What is your current annual budget (*in dollars*)?

What percent of your budget comes from OSI
(both NY and in-country foundations)?

What percent of your budget comes from *other* sources?

Please specify *other* income sources of importance

(e.g., contracts from government agencies or grants):

12. Please specify in-kind donations of materials and other resources that you and your country team members have organized or secured for Step by Step. For example, list a corporate donation of toothbrushes or an arrangement your team initiated to get a second staff member in the classroom paid for by another agency. List all items that you believe have built capacity at the local level.

II. Support for Kindergartens

13. On average, how often **each year** does someone from your central team visit each kindergarten to give technical assistance? (Circle the best choice.)

once 2 - 3 times 4 - 6 times 7 - 11 times monthly or more

14. The previous item asked for the average number of visits per kindergarten. Here we want to know the range. That is, what is the fewest number of visits and the most that you provide to kindergartens in a year. Explain the reasons for varying numbers of technical assistance visits.

Range: _____ visits to _____ visits

Reason: _____

15. Who typically receives this technical assistance: (check all that apply)

- ☐ Principals/Directors
☐ Classroom Teachers and Assistants
☐ Parent Groups
☐ Other (Specify): _____

16. What were the three most frequent topics addressed by your technical assistance this past year?

17. On average, how often do you meet with director/principal each year to provide technical assistance? Include group meetings or technical assistance provided to directors only. (Circle the best choice.)

once 2 - 3 times 4 - 6 times 7 - 11 times monthly or more

18. a) Each year how many workshops do you provide for classroom teachers? (Circle the number that best reflects an average for most teachers.):

<i>lead teacher</i>	0	1	2	3	4	5	6+
<i>teacher assistant</i>	0	1	2	3	4	5	6+

- b) Identify three of the most important topics that you've trained teachers on over the past year.

19. a) **Each year** how many workshops do you sponsor for principals/kindergarten directors?
(Circle the number that best reflects an average for most directors):

directors/principals 0 1 2 3 4 5 6+

- b) Identify three of the most important topics that you've trained directors/principals on over the past year.

20. a) **Each year** how many workshops do you sponsor for site managers/family coordinators?
(Circle the number that best reflects an average for most directors):

site managers/family coordinators 0 1 2 3 4 5 6+

- b) Identify three of the most important topics that you've trained site managers/family coordinators on over the past year.

21. a) **Each year** how many workshops do you sponsor for others (e.g., pedagogues, Model Training Site Coordinators)? (Circle the number that best reflects an average for most directors):

Other: _____ 0 1 2 3 4 5 6+

Other: _____ 0 1 2 3 4 5 6+

Other: _____ 0 1 2 3 4 5 6+

- b) Identify three of the most important topics that you've trained these other personnel on over the past year.

22. Who at the local level observes classroom teachers and provides constructive feedback/recommendations?

- ☐ Methodologist
- ☐ Principal
- ☐ Experienced Teachers
- ☐ Trainers from Model Training Sites
- ☐ Other; specify: _____

23. On average, how often do you think these observations occur each year?
1-3 times 4-6 times monthly 2 times/month weekly more often

24. Do you have Model Training Sites?

- ☐ Yes
- ☐ No

If yes:

How many focus on kindergartens? _____

How many focus on primary schools? _____

How many focus on both? _____

25. What process did you and your team use to select these sites? Provide specific evaluation criteria if applicable.

26. What services do your Model Training Sites offer? (Check all that apply.)

- ☐ Provide training to interested teachers
- ☐ Provide training to interested administrators
- ☐ Provide general orientation to the Step by Step program
- ☐ Arrange student teacher practicum
- ☐ Provide follow-up technical assistance
- ☐ Parent education/parent involvement
- ☐ Practicum for experienced teachers
- ☐ Conduct collaborative research with pedagogical institutions
- ☐ Develop/distribute curriculum materials
- ☐ Training for student teachers
- ☐ Other: please specify _____

27. For each item checked above (#26), please indicate the number of times your Model Training Sites provided each of the services selected from January to November 1998. Next to each service offered estimate the number of participants who received these services during this time period.

Services	# of Events/Times	# of Participants
Provide training to interested teachers		
Provide training to interested administrators		
Provide general orientation to the Step by Step program		
Arrange student teacher practicum		
Provide follow-up technical assistance		
Parent education/parent involvement		
Practicum for experienced teachers		
Conduct collaborative research with pedagogical institutions		
Develop/distribute curriculum materials		
Training for student teachers		
Other: please specify _____		

28. What are two important challenges you face in operating Model Training Sites?

29. Rate the following factors for implementing the Step by Step program. Indicate the most important by checking the box in column (4). Indicate the least important by checking the box in column (1).

	1	2	3	4
Factors	Least Important			Most Important
A methodology based on well defined and supported practice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A methodology available in written form	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Training workshops	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
On-going technical assistance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Educational materials for classrooms (books, manipulatives, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Opportunities to exchange information with other teachers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Opportunities to exchange information with other kindergarten directors	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Teaching assistants or other adults in classroom	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family coordinator	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Family room	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Model Training Sites	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Relationship with local authorities	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

III. Efforts with Other Institutions

30. In what ways do you work with the Ministry of Education? (Check all that apply)

- ☐ Routinely provide them with information about our activities
- ☐ Usually invite a representative to participate in national and local events
- ☐ Meet regularly to discuss plans and involve Ministry representative in planning
- ☐ Provide training to Ministry staff
- ☐ Other. Please specify: _____

31. In what ways has the Ministry of Education provided financial support to the Step by Step program?

32. In what ways has the Ministry of Education supported the Step by Step program with other resources (e.g., changed regulations)?

33. Do you believe that the Step by Step program has had an impact on education policy in your country?

- ☐ Yes ☐ No

34. If yes, describe two specific examples that illustrate the different ways you believe that Step by Step has had an impact on educational policy.

35. In what ways have you worked with Pedagogical Institutes and Universities in training faculty to learn more about the Step by Step methodology?

- ☐ CRI-sponsored seminars for faculty
- ☐ Course materials
- ☐ Locally-sponsored seminars for faculty
- ☒ Coordinating student teacher placements
- ☐ Other. Please specify: _____

36. What did you consider as you approached your work with higher education? Tell us about your strategy.

37. Please describe your impact on the higher education system in your country by rating the extent to which the following practices have been adopted/used.

Practices	1 No Evidence of Adoption	2 Adopted by 1%-30% of	3 Adopted by 31% - 60%	4 Adopted by 61% or More
More interactive teaching methods used by faculty				
New courses reflect Step by Step methodology in their content (e.g., individualizing)				
Existing courses incorporate the Step by Step methodology in their content				
Changed physical environment of university classrooms to reflect Step by Step methodology				
Use of resource materials/texts introduced by Step by Step				
New research practices that focus on applied methods				
Teamwork in teaching at the higher education level				
Collaboration between faculty and Step by Step staff either in collaborative research or training				
Other (specify): _____				
Other (specify): _____				

38. In what ways do you feel the Step by Step program has made an impact on teacher training and retraining in your country? Please describe.

39. The purpose of this Phase of the evaluation is to collect information about your impact within your country. Please use the space below to add any examples or describe the unique ways in which you feel your Step by Step program has been successful.

Thank you!

Early Childhood Classroom Observation (NAEYC)

**Adapted by Education Development Center, Inc. (EDC)
for the Step by Step Evaluation 1998**

**Used with permission of the National Association for the Education of
Young Children (NAEYC)**

Early Childhood Classroom Observation (NAEYC)

Codes: For Data Collectors' Use Only

Country: _____

Condition: _____

Kindergarten: _____

Classroom: _____

Role: _____

Teacher: _____

#Children in class _____ #boys: _____ #girls: _____

#Adults in classroom _____

- _____ Head Teacher
- _____ Assistant Teacher
- _____ Parent Volunteer
- _____ Student Teacher
- _____ Other: Specify _____

Age Range:

_____ 4 - 5 years old

_____ 5 years old

_____ 5 -6 years old

Other (Specify): _____

Observer: _____

Date of Observation: _____

Start time of observation: _____

End time of observation: _____

Early Childhood Classroom Observation

A. Interactions among Staff and Children

CRITERION	RATING			COMMENTS
	Not Met	Partially Met	Fully Met	
A-1. Staff interact frequently with children showing affection, interest, and respect.	<div>1</div>	<div>2</div>	<div>3</div>	
<input type="checkbox"/> Staff interact nonverbally by smiling, touching, holding.				
<input type="checkbox"/> Staff talk with and listen to individual children during activities and routines (arriving/departing, eating).				
<input type="checkbox"/> Staff actively seek meaningful conversations with children.				
A-2. Staff are available and responsive to children.	<div>1</div>	<div>2</div>	<div>3</div>	
<input type="checkbox"/> Listen to children with attention and respect.				
<input type="checkbox"/> Respond to children's questions and requests.				
<input type="checkbox"/> Staff are aware of the activities of the entire group even when dealing with a smaller group; staff position themselves strategically and look up often from involvement.				
<input type="checkbox"/> Staff spend time observing each child without interrupting an actively involved child.				
A-3a. Staff speak with children in a friendly, courteous manner.	<div>1</div>	<div>2</div>	<div>3</div>	
<input type="checkbox"/> Speak with individual children often.				
<input type="checkbox"/> Staff include child in conversations; describe actions, experiences, and events; listen and respond to children's comments and suggestions.				
<input type="checkbox"/> Speak with children at eye level.				
<input type="checkbox"/> Call children by name.				
A-3b. Staff talk with individual children, and encourage children of all ages to use language.	<div>1</div>	<div>2</div>	<div>3</div>	
<input type="checkbox"/> Staff ask preschoolers open-ended questions.				
<input type="checkbox"/> Staff encourage children to talk about their day and their experiences at home.				

CRITERION	RATING			COMMENTS
	Not Met	Partially Met	Fully Met	
A-4a. Staff treat children of all races, religions, family backgrounds, and cultures equally with respect and consideration. <i>For example,</i> Staff initiate activities and discussions to build positive self-identity and teach value of differences. Staff provide books, dolls, toys, dress-up props, photos, pictures, and music that reflect diverse images children may not likely see elsewhere, as well as those that reflect lives of those in the classroom. Staff make it a consistent practice that a person's identity (age, race, ethnicity, family life, physical appearance, and ability) is valued, acknowledged, and represented in images and activities. Staff talk positively about each child's physical characteristics and cultural heritage. Staff react to teasing or rejecting among children by intervening to discuss similarities and differences.	<div>1</div>	<div>2</div>	<div>3</div>	
A-4b. Staff provide children of both sexes with equal opportunities to take part in all activities. <i>For example,</i> Provide models, props, and visual images that counter traditional sex-role limitations (i.e., female firefighter, male nurses). Value positive levels of noise and activity involving both girls and boys. When acknowledging individual children, avoid gender stereotypes in language references (i.e., use words such as <i>strong, gentle, pretty, helpful</i> for both girls and boys). If small groups are designated, avoid dividing by gender.	<div>1</div>	<div>2</div>	<div>3</div>	
A-5. Staff encourage independence in children as they are ready. <input type="checkbox"/> Encourage children to assume responsibility for performing responsible jobs (i.e., picking up toys, setting table). <input type="checkbox"/> Assume responsibility for self-help (for example, dressing themselves). <input type="checkbox"/> Encourage children to make choices among activities.	<div>1</div>	<div>2</div>	<div>3</div>	

CRITERION	RATING			COMMENTS
	Not Met	Partially Met	Fully Met	
A-6a. Staff use positive approaches to help children behave constructively. <input type="checkbox"/> Consistent, clear rules developed in conjunction with children and discussed with them to make sure they understand. <input type="checkbox"/> Staff describe the situation to encourage children's evaluation of the problem rather than impose the solution. <input type="checkbox"/> Logical or natural consequences applied in problem situations.	1	2	3	
A-6b. Staff do not use physical punishment or other negative discipline methods that hurt, frighten, or humiliate children. <i>For example,</i> Staff do not force children to apologize or explain their behavior but help children recognize another child's feelings. Food or beverage is never withheld as a discipline device.	1	2	3	
A-7. Overall sound of group is pleasant most of the time. <i>For example,</i> Happy laughter, excitement, busy activity, relaxed talking. Adult voices do not dominate.	1	2	3	
A-8a. Children are generally comfortable, relaxed, happy, and involved in play and other activities.	1	2	3	
A-8b. Staff help children deal with anger, sadness, and frustration by comforting, identifying, reflecting feelings, and helping children use words to solve their problems.	1	2	3	

CRITERION	RATING			COMMENTS
	Not Met	Partially Met	Fully Met	
A-9. Staff encourage prosocial behaviors in children such as cooperating, helping, taking turns, talking to solve problems. <i>For example,</i> Adults model the desired behaviors. Adults identify, describe, and offer strategies to develop prosocial behaviors. Adults initiate opportunities for exploring and valuing similarities and differences.	<div>1</div>	<div>2</div>	<div>3</div>	
A-10. Staff expectations of children's social behavior are developmentally appropriate. <i>For example,</i> Preschoolers are encouraged to cooperate in small groups. Children have opportunities to participate in group games or to work or play alone.	<div>1</div>	<div>2</div>	<div>3</div>	
A-11. Children are encouraged to talk about feelings and ideas instead of solving problems with force. <input type="checkbox"/> Adults intervene quickly when children's responses to each other become physical and discuss the inappropriateness of such responses. <input type="checkbox"/> Adults discuss alternative solutions with children.	<div>1</div>	<div>2</div>	<div>3</div>	

B. Curriculum (Note: A page is not missing. The letters and numbers are not in consecutive order because only some of the criteria are observed in each classroom.)

CRITERION	RATING			COMMENTS
	Not Met	Partially Met	Fully Met	
B-4. The daily schedule provides a balance of activities in consideration of the child's total daily experience what happens before, during, and after the program with attention to the following dimensions:	<div>1</div>	<div>2</div>	<div>3</div>	
B-4a. All age groups play outdoors daily, weather permitting.	<div>1</div>	<div>2</div>	<div>3</div>	

CRITERION	RATING			COMMENTS
	Not Met	Partially Met	Fully Met	
B-4b. The schedule provides for alternating periods of quiet and active play.	<input type="text" value="1"/>	<input type="text" value="2"/>	<input type="text" value="3"/>	
B-4c. More than one option for group activity (individual, small group, or large group) is available most of the day.	<input type="text" value="1"/>	<input type="text" value="2"/>	<input type="text" value="3"/>	
B-4d. A balance of large muscle/small muscle activities is provided in the daily schedule.	<input type="text" value="1"/>	<input type="text" value="2"/>	<input type="text" value="3"/>	
B-4e. A balance of child-initiated/staff-initiated activity is provided while limiting the amount of time spent in large group, staffinitiated activity.	<input type="text" value="1"/>	<input type="text" value="2"/>	<input type="text" value="3"/>	
B-5a. Multiracial, nonsexist, nonstereotyping pictures, dolls, books, and materials are available.	<input type="text" value="1"/>	<input type="text" value="2"/>	<input type="text" value="3"/>	
B-5d. Developmentally appropriate materials and equipment are available for <i>preschoolers</i> .	<input type="text" value="1"/>	<input type="text" value="2"/>	<input type="text" value="3"/>	
<input type="checkbox"/> Active play equipment for play and balance.				
<input type="checkbox"/> Unit blocks and accessories.				
<input type="checkbox"/> Puzzles, manipulative toys.				
<input type="checkbox"/> Picture books and records, musical instruments.				
<input type="checkbox"/> Art materials such as finger and tempera paints, crayons, scissors, and paste.				
<input type="checkbox"/> Dramatic play materials such as dolls,				
<input type="checkbox"/> Sand and water toys.				
<input type="checkbox"/> Science projects.				

CRITERION	RATING			COMMENTS
	Not Met	Partially Met	Fully Met	

B-7. Staff provide a variety of developmentally appropriate hands-on activities for children to achieve the following goals:

(Rate each goal separately considering the examples related to the age group being observed.)

B-7a. Foster positive self-concept.

1	2	3
---	---	---

For example,

Allow time for children to talk about what they see, do, and like.

Use children's names frequently in songs, games.

Display children's work and photos of children and their families.

Encourage children to draw pictures and tell stories about self, family, and cultural practices.

Provide many opportunities for children to initiate activity, develop and demonstrate control of their bodies and self-help skills.

Provide opportunities to express growing independence/self-reliance such as the ability to make choices, initiate own activities

Allow opportunities to work or play alone.

Provide ways to ensure privacy.

Plan cooperative rather than competitive activities.

Recognize preference for self-selected peer groups.

Display children's work and photos of children and their families.

Provide opportunities to explore cultural heritage.

B-7b. Develop social skills.

1	2	3
---	---	---

- ☐ Create space and time for small groups of children to build blocks together or enjoy dramatic play.
- ☐ Provide opportunities for children to work together, to take responsibility for the group (e.g., caring for pets or helping others).
- ☐ Explore ways to respond to interact in acceptable ways (e.g., how to respond to biased or negative comments and behaviors).
- ☐ Allow time to sit and talk with friend or adult.

CRITERION	RATING			COMMENTS
	Not Met	Partially Met	Fully Met	
B-7c. Encourage children to think, reason, question, and experiment.	<div>1</div>	<div>2</div>	<div>3</div>	
<input type="checkbox"/> Activities for labeling, classifying, sorting objects by shape, color, and size.				
<input type="checkbox"/> Extend children's thinking and learning by adding new materials.				
<input type="checkbox"/> Provide open-ended activities that allow for exploration and concept development. For example, gardening, seed growing, field trips, opportunities to count and use numbers.				
<input type="checkbox"/> Discuss daily and weekly routines in terms of time concepts, seasons of the year.				
<input type="checkbox"/> Extend children's thinking by offering ideas or suggestions, joining in their play, and providing assistance in solving problems.				
B-7d. Encourage language and literacy development.	<div>1</div>	<div>2</div>	<div>3</div>	
<input type="checkbox"/> Read books each day.				
<input type="checkbox"/> Provide time for conversation. (E.g., tell stories about experiences, talk about pictures, use puppets, songs or finger plays.)				
<input type="checkbox"/> Label things in room, use written words with pictures and spoken language, provide a print-rich environment.				
<input type="checkbox"/> Provide opportunities to read books.				
<input type="checkbox"/> Write down experience stories children dictate.				
<input type="checkbox"/> Answer children's questions and ask child questions that require more than a one-word answer.				
<input type="checkbox"/> Encourage children's emerging interest in writing (scribbling, drawing, copying, and inventing own spelling).				

CRITERION	RATING			COMMENTS
	Not Met	Partially Met	Fully Met	
B-7e. Enhance physical development.	<div>1</div>	<div>2</div>	<div>3</div>	
<p><i>For example,</i> Provide time and space for active play such as jumping, running, balancing, climbing, riding tricycles. Provide creative movement activity using obstacle course or activity songs and records. Provide fine-motor activities such as stacking rings, pop-beads, pegboards, and puzzles, lacing cards, and woodworking.</p>				
B-7f. Encourage and demonstrate sound health.	<div>1</div>	<div>2</div>	<div>3</div>	
<p><i>For example,</i> Cook and serve a variety of nutritious foods. Discuss good nutrition. Do activities to develop safety awareness in the center, home, and community. Encourage health practices such as washing hands, brushing teeth, getting regular exercise and enough rest. Talk about visiting doctor, dentist.</p>				
B-7g Encourage creative expression and appreciation for the arts.	<div>1</div>	<div>2</div>	<div>3</div>	
<p><i>For example,</i> Do creative art activities such as brush painting, drawing, collage, and playdough, weaving, singing, playing instruments. Provide time and space for dancing, movement activities, creative dramatics. Do musical activities such as singing, listening to records, playing instruments. Provide materials representative of a variety of cultures.</p> <p><input type="checkbox"/> Most art activities are offered as an exploratory process rather than to produce a product.</p> <p><input type="checkbox"/> Adult made models, patterns, and pre-drawn forms are used infrequently.</p> <p><input type="checkbox"/> Provide planned and spontaneous activities in arts and crafts such as mural and easel painting, ceramics, carpentry.</p>				

CRITERION	RATING			COMMENTS
	Not Met	Partially Met	Fully Met	
B-7h. Respect cultural diversity.	<div>1</div>	<div>2</div>	<div>3</div>	
<p><i>For example,</i></p> <p>Provide materials, images, and experiences that reflect diverse cultures that children may not likely see, as well as those that represent their family life and cultural group.</p> <p>Initiate discussions and hands-on activities to build appreciation for differences and counter biases.</p> <p>Talk positively about each child's physical characteristics, family, and cultural heritage.</p> <p>Avoid stereotyping of any group through materials, objects, language.</p> <p>Cook and serve foods from children's various contemporary cultures.</p> <p>Celebrate holidays of various cultures reflected in the group.</p> <p>Read books, display pictures of various cultures.</p> <p>Invite parents and other visitors to share arts, crafts music, dress, and stories of various cultures.</p> <p>Take trips to museums, cultural resources of community.</p> <p>Infuse all curriculum topics with diverse cultural perspectives, avoiding a "tourist" approach.</p>				
B-8. Staff provide materials and time for children to select their own activities during the day.	<div>1</div>	<div>2</div>	<div>3</div>	
<p><input type="checkbox"/> Several alternative activities are available for preschooler's choice.</p> <p><input type="checkbox"/> Staff respect the child's right not to participate in some activities.</p> <p><input type="checkbox"/> Staff pick up on activities that children start, or interests that children show.</p> <p><input type="checkbox"/> Children prepare materials, plan and choose their own activities.</p>				
B-9. Staff conduct smooth and unregimented transitions between activities.	<div>1</div>	<div>2</div>	<div>3</div>	
<p><input type="checkbox"/> Children are told to get ready for transition ahead of time.</p> <p><input type="checkbox"/> Children are not always required to move as a group from one activity to another.</p> <p><input type="checkbox"/> The new activity is prepared before the transition from the completed activity to avoid waiting.</p>				

CRITERION	RATING			COMMENTS
	Not Met	Partially Met	Fully Met	
B-10. Staff are flexible and change planned or routine activities as needed. <i>For example,</i> Staff follow needs or interests of the children. Staff adjust to changes in weather or other unexpected situations in a relaxed ay without upsetting children.	1	2	3	
B-11. Routine tasks such as toileting, eating, dressing, and sleeping are handled in a relaxed and individualized manner.	1	2	3	
<input type="checkbox"/> Routine tasks are used as opportunities for pleasant conversation and playful interaction to bring about children's learning.				
<input type="checkbox"/> Self-help skills are encouraged as children are ready.				
<input type="checkbox"/> Routines are tailored to children's needs and rhythms as much as possible.				

G. Physical Environment

CRITERION	RATING			COMMENTS
	Not Met	Partially Met	Fully Met	
G-2. Space is arranged to accommodate children individually, in small groups, and in a large group.	1	2	3	
<i>For example,</i> There are clearpathways for children to move from one area to another without disturbing activities. Areas are organized for easy supervision by staff. Program staff have access to the designated space in sufficient time to prepare the environment before children arrive.				

CRITERION	RATING			COMMENTS
	Not Met	Partially Met	Fully Met	
G-3. Space is arranged to facilitate a variety of activities. <input type="checkbox"/> block building area <input type="checkbox"/> dramatic play area <input type="checkbox"/> art and/or music area math area <input type="checkbox"/> science area <input type="checkbox"/> quiet book reading area <input type="checkbox"/> sand or water play available regularly <input type="checkbox"/> space for one or two children to be quiet	1	2	3	
G-4. A variety of age-appropriate materials and equipment are available for children indoors and outdoors. <input type="checkbox"/> A sufficient quantity of materials and equipment is provided to avoid problems with sharing or waiting. <input type="checkbox"/> Materials are durable and in good repair. <input type="checkbox"/> Materials are organized consistently on low, open shelves to encourage independent use by children. <input type="checkbox"/> Extra materials are accessible to staff to add variety to usual activities. <input type="checkbox"/> Materials are rotated and adapted to maintain children's interest.	1	2	3	
G-6. Private areas where children can play or work alone or with friend are available indoors, outdoors. <i>For example,</i> Book corners, tunnels, or playhouses that are easy for adults to supervise.	1	2	3	
G-7. The environment includes soft elements. <i>For example,</i> Rugs, cushions, soft furniture, soft toys, comfortable chairs for adults to hold children in their laps.	1	2	3	

I. Nutrition and Food Service

CRITERION	RATING			COMMENTS
	Not Met	Partially Met	Fully Met	
I-3. Mealtime is a pleasant social and learning experience for children.	<div>1</div>	<div>2</div>	<div>3</div>	
<input type="checkbox"/> Mealtimes promote good nutrition habits.				
<input type="checkbox"/> At least one adult sits with children during meals to provide a good role model and encourage conversation.				
<input type="checkbox"/> Preschoolers are encouraged to serve and feed themselves and assist with clean-up.				
<input type="checkbox"/> Chairs, tables, and eating utensils are suitable for the size and developmental levels of the children.				

J. Family Participation

CRITERION	RATING			COMMENTS
	Not Met	Partially Met	Fully Met	
J-1. Families are encouraged to participate in the program.	<div>1</div>	<div>2</div>	<div>3</div>	
<input type="checkbox"/> Staff make program information available to families				
<input type="checkbox"/> Books and materials are available for loan to families				
<input type="checkbox"/> Children's work is sent home to parents				
<input type="checkbox"/> A room is supplied for parents to use				
<input type="checkbox"/> Staff are available at drop-off and pick-up times				
<input type="checkbox"/> Family members participate in classroom activities				

STEP BY STEP PROGRAM EVALUATION

EMERGENT LITERACY ASSESSMENT*

Instructions for Administration: English Version

David K. Dickinson

Joanne P. Brady

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Education Development Center, Inc.

*The *Emergent Literacy Assessment* is adapted from the *Emergent Literacy Profile* by David K. Dickinson (Education Development Center, Inc.) and Carolyn Chaney (San Francisco State University).

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TASK 1: LETTER IDENTIFICATION

Materials: 3 laminated cards with 4 letters printed on each

Purpose

The purpose of this task is to determine the child's knowledge of the letters of the alphabet. Letter knowledge has long been shown to be one of the strongest early predictors of children's later reading growth. Children develop an understanding of letters in varied ways; therefore this task allows children to display their knowledge in different ways, by producing responses or by identifying letters after you name them.

Overview

Tell the child that you will be asking him/her to identify some letters. Then place the first card with letters on it directly in front of the child. Point to the letter on the farthest left side of the card and ask the child to name the letter or say what sound it makes. Either response is acceptable. Ask the child to name all four letters on a card.

If the child does not give a correct response for any of the four letters on a card, ask him/her to point to each letter as you name it. Name a letter and ask the child to point to it. Repeat this procedure for all four letters. Name the letters in the order indicated by the small numbers next to each letter on the form where the child's responses are recorded. Note that this order does not follow the left-to-right order in which the letters are written on the cards. Give the child 1 point for each letter s/he points to correctly unless s/he already received 2 points for naming the letter.

Take the card back after you have finished with all four letters. Place it face down and present the next card. Keep the cards that have not yet been presented in a pile next to you in a place where the child cannot be distracted by them. Use the same procedure for all three cards.

Specific Instructions:

Say:

"Now I am going to show you some letters. I want to know if you can name some of them."

1) Card #1: (4 upper case letters)

a) Hand the card to the child. Point to each letter. For each letter, say:

"What is the name of this letter?"

If the child does not know its name, say:

"Do you know its sound?"

b) If the child does not name or give the sound of any letter, say:

"Now I'm going to tell you the names of these letters. I want you to point to the letter whose name I give you, OK? Can you show me which one is the _____?"

Name the letters in this order: (order written on card).

Scoring Directions: Letter Identification

Child names the letter correctly or produces the correct sound (for example, buh for B). 2 points

Child correctly identifies the letter after you name it. 1 point
If a child first names a letter or produces its sound first, and then identifies it when you name it, give the child a score of 2.

Child cannot point to the letter, even when you name it. 0 points

2) Hand the child Card #2 (2 upper case, 2 lower case).

a) Point to each letter. For each letter, say:

"What is the name or sound of this letter?"

b) If the child does not name or give the sound of any letter, say:

"Now I'm going to tell you the names of these letters. I want you to point to the letter whose name I give you, OK? Can you show me which one is the _____?"

Name the letters in this order: (order printed on response sheet)

3) Hand the child Card #3 (2 upper case, 2 lower case letters).

a) If the child has not named or given the sound of any letter on the first two cards then ask:

"Do you see any letters that you know?"

If the child answers "yes" then ask: *"What is it's name or sound?"*

Continue asking if he/she knows more letters until no more are known.

If the child has named one or more letters correctly, proceed as before. Point to each letter. For each letter, say:

"What is the name or sound of this letter?"

b) If the child does not name or give the sound of any letter, say:

"Now I'm going to tell you the names of these letters. I want you to point to the letter whose name I give you, OK? Can you tell me which one is the _____?"

Name the letters in this order: (order on response form).

TASK 2: EMERGENT WRITING

Materials: Appropriate writing implements to choose from.
Unlined paper for child's writing.

Purpose

The purpose of this task is to allow children to display their understanding of the structure of written language and how it is written. Children will have a chance to reveal their understanding of literacy in their approach to the writing task, in how they form letters, and in how they use letters to represent sounds.

Overview

This task has three parts. First, the child will write her/his name, then s/he will write two words of her/his own choosing, and finally s/he will write three words you give her/him. The same scoring approach is used for the child's name and the two words s/he chooses to write. A different scoring system is used for the words you give the child.

Give the child a piece of writing paper and two writing implements from which to choose. After the child selects a writing tool, ask her/him to write her/his name on the paper. Note that no identifying information should be written on this paper until after the child has finished writing. If the child is reluctant, explain that some children have their own way to write their names. Encourage him/her to write it any way that s/he can. As the child writes, observe how s/he holds the writing implement and the direction in which s/he proceeds (right to left, left to right, top to bottom). Also listen to what s/he says while working because this will help you understand what s/he intended to write. When the child is finished, ask questions to learn what s/he wrote and how the marks on the paper reflect his/her writing efforts. Record needed scoring information. It is essential that you record all scoring information based on your observation of the child's writing.

Repeat the same sequence for the two words that the child selects.

Remember to put identifying information on the child's paper after you get it back. (That is, the child's name and code number.)

A) NAME WRITING

Specific Instructions:

Say:

"Now I'd like to see how you write your name. Write it on this piece of paper."

Give the child a choice of two writing implements.

Observe how the child holds the writing implement and puts marks on the paper. Note if s/he writes from the left to the right or moves in some other direction (e.g., right to left, top to bottom). Also listen to any sounds or words s/he produces while writing to help you determine if the child is trying to record a name or is doing something else. Make notes about the writing process in the space provided on the score form.

After the child is finished, say:

“Now I would like you to tell me about your writing. Can you tell me what you wrote?”

Note that the child could be writing a first or last name or a nickname. Record what the child says s/he was writing on the score form.

Say:

“Can you show me how you wrote that?”

Have the child point to specific parts of what s/he wrote. Listen carefully so that you understand as much as possible about what the child attempted to write.

Learn the following:

- 1) What was the child trying to write? Is it some version of his/her own name (first name, last name, nickname)? Is it an unexpected production (for example, the child cannot tell you what the marks mean; the marks represent something the child likes instead of his/her name)?
- 2) Are there conventional letters included?
- 3) Do any conventional letters come from the name the child is trying to write? If so, how many?

Assign a score for each of the elements being scored.

Scoring: Name Writing

Intentionality:

The child says own name when asked what s/he wrote: 1 point
(The child may say any portion of her/his name or may use a nickname.)

Child tells a story, says things other than own name. 0 points

Conventionality: See if the letters the child wrote relate to the name the child said s/he was writing.
Reversed letters are always counted as correct.

70% or more letters in the attempted name are correct. 3 points
(3 of 4, 4 of 5, 5 of 6, 5 of 7, 6 of 8, 7 of 9)

Two or more letters from the attempted name are correct, 2 points
but less than 70% are correct.

One or more conventional letters, but they may not all 1 point
be in the name the child said she was writing.

No conventional letters. 0 points

B) CHILD'S OWN WORDS

Specific Instructions:

Have the child continue to use the same paper.

FIRST WORD

Say:

"Now I want you to write any word that you know how to write."

Reassure the child that s/he can write it in "his/her own way."

After the child is finished, say:

"Now I would like you to tell me about your writing. Can you tell me what you wrote?"

Record the word the child said s/he was writing in the space provided on the score form.

Say:

"Can you show me how you wrote that?"

Have the child point to specific parts of what she wrote. Listen carefully so that you understand as much as possible what the child attempted to write.

Record the word the child said s/he was trying to write.

Record needed scoring information.

SECOND WORD

Repeat the sequence just used for the word the child chose to write. Record scores.

Scoring: Words Child Chooses and Overall Score

Scores assigned for **each word** the child writes:

Conventionality: (possible 3 points)

Word spelled correctly. 3 points

In one syllable word, all sounds except one are spelled correctly. In two or more syllable word, correct letters for 3+ sounds. 2 points

One sound correctly spelled in one syllable words. One or two sounds correctly spelled in two or more syllable words. 1 point

No conventional letters. 0 points

Scores assigned **after all three words** (name and two words) are written:

Grasp: (possible 1 point)

Holds writing tool in appropriate manner at any time. 1 point

Directionality: (possible 2 points)

Writing produced from left to right. 1 point

Writing organized from top to bottom of paper or clearly organized left to right, with no need for a second line. 1 point

C) WORD WRITING

Specific Instructions:

Discontinuation Rule:

Do not do this task if the child did not spell any sounds in a conventional manner when s/he was writing words of her/his own choosing. Skip to EARLY READING.

FIRST WORD

Say:

"Now I want you to write a word I will tell you. Please write _____. Spell it the best way you can."

If you are not sure what letters the child wrote, ask the child to tell you what s/he wrote.
Record needed scoring information.

SECOND WORD

Say:

"Now I want you to write a word I will tell you. Please write _____. Spell it the best way you can."

If you are not sure what letters the child wrote, ask the child to tell you what s/he wrote.
Record needed scoring information.

THIRD WORD

Say:

"Now I want you to write a word I will tell you. Please write _____. Spell it the best way you can."

If you are not sure what letters the child wrote, ask the child to tell you what s/he wrote.
Record needed scoring information.

Be sure that you write the child's name on the paper with her/his writing after s/he completes all the writing tasks.

Scoring: Word Writing (possible total = 9 points)

Word spelled correctly.	3 points
Two of three sounds correctly represented.	2 points
Initial sound correctly represented.	1 point
No sounds correctly represented.	0 points

TASK 3: EARLY READING

Materials: Card with child's commonly used name printed in upper case letters. (Prepare this card before the session.)

Card with eight standard words.

Paper used to cover words until they are presented.

Purpose

This task asks children to display their ability to read simple words. They first are asked to read their own names because this typically is the first word children learn to recognize. Words they are shown are of increasing difficulty to provide some challenge for more advanced readers. It is expected that children will not be able to read each word quickly; they may need to sound out some words sound by sound.

Specific Instructions:

In preparation for this task, after the first day of testing, you should print the child's commonly used name in upper and lower case letters on a piece of paper. Start by showing the child his/her own name. Next present the paper with the additional eight words on it. Cover all words except the first one. Draw the child's attention to the first word and ask the child what s/he thinks it says. Reassure the child that is fine to guess. Record a score after each word. Repeat this procedure until all words have been presented.

1. Show the child the paper on which you have written his/her name.

Say:

"Now I'd like you to read something that I have written. Can you tell me what this says?"

Record the child's score. Determine if you should continue this task.

Discontinuation Rule:

If the child cannot read his/her own name **and** was not able to write any sounds accurately in the previous spelling task, move on to Task 4.

2. Show the child the card that has the words. Cover all except the top word.

For each word say:

"Can you tell me what this says? If you are not sure you can guess what you think it might say."

Record the score.

Slide the paper down to present the next word. Continue as above.

Discontinuation Rule:

If the child is unable to read four words in a row, stop this portion of the early literacy assessment.

Scoring: Early Reading Task (possible total = 9 points)

Child reads the word correctly.

1 point

(Do not count a word as “wrong” simply because the child has a problem pronouncing the word correctly due to articulation problems or accent.)

Child does not know word or is incorrect.

0 points

TASK 4: PRINT CONCEPTS AND READING COMPREHENSION

Materials: Where's My Monkey? (adapted version)

Purpose

The purpose of this task is to assess children's understanding of print concepts as well their reading comprehension. This task is comprised of three activities, all of them involve the use of the book, *Where's My Monkey?*, by Dieter Schubert. The task involves observing and scoring children's book knowledge (e.g., book orientation, author) and print concepts (e.g., left to right directionality, word concept). It also involves a reading of the adapted version of *Where's My Monkey?*, asking questions to assess children's comprehension. To make this portion of the task easier to administer, the comprehension questions appear in the book, below the text.

A) PRINT CONCEPTS -SECTION 1

Specific Instructions:

1. Hand the child the book, *Where's My Monkey?*, with the title page facing down and the end pages toward the child and say:

“(Child's name), here is a book we are going to read.”

Scoring: Orientation

Observe if the child orients the book correctly (title page up and text oriented toward him/her). Book is oriented correctly (both elements).	1 point
Book is not oriented correctly (one element may be present).	0 points

2. If the child has not oriented the book correctly, gently adjust the book before proceeding. Point to the title of the book and ask:

“What is this?”

If the child answers “title” or “name of the book” then read the title. *“The title of this book is Where's My Monkey?”*

If the child does not answer or answers incorrectly say:

“This is the title or name of the book. The title of this book is Where's My Monkey?”

Scoring: Title

Child identifies the title using the word "title" or reasonable approximation. 1 point

Child does not respond or answers incorrectly. 0 points

3. Point to the name of the author and say:

"by Dieter Schubert. Who is he?"

Accept responses such as author, person who wrote the book, writer, or equivalent responses.
If the child does not know then say:

"Dieter Schubert is the author, the person who wrote the book."

Scoring: Author

Child responds with author, writer, or equivalent. 1 point

Child does not respond or answers incorrectly. 0 points

4. Ask the child:

"Show me the beginning of the story."

Scoring: Story Start

Child indicates the first page of the story (text or picture). 1 point

Child indicates something other than the first page. 0 points

5. Then say:

"Point to where I should start reading."

If the child points to the beginning of the text, then ask:

"Show me where I should read next." Continue to prompt the child to determine if they understand both elements of directionality (i.e., left to right, and top to bottom).

If the child does not know where to start reading, show the child and ask: ***"Where should I read next?"***

Scoring: Directionality

Child indicates beginning of text and both elements of directionality.	2 points
Child indicates beginning of text but does not show understanding of both elements of directionality. Or, child fails to indicate beginning but does indicate both elements of directionality.	1 point
Child does not indicate the beginning of the text.	0 points

B) READING COMPREHENSION**Specific Instructions:**

Before reading the story, *Where's My Monkey?*, readjust your position so that both you and the child are comfortable. Pace your reading so that the child has sufficient time to examine the pictures. This is important because the questions asked of the child are text dependent and, therefore, the child must pay attention to the reading. (Suggested pause before reading text is 3 to 4 seconds.)

1. Read the text printed on page 1, then ask:

"What is Michael going to do?"

Scoring: Question 1

Child says "go on a bicycle ride".	1 point
Child does not respond or offers incorrect response.	0 points

2. Continue reading until you finish page 4, then ask:

"What did they do before they had a picnic?"

Scoring: Question 2

Child says "fed ducks" or "fed birds".	1 point
Child gives incorrect response or says "I don't know".	0 points

3. Turn to page 5 and read the text. Then ask:

“Why was Michael’s mother riding so fast?”

Scoring: Question 3

Child says “to get out of the rain” or a similar response. 1 point

Child gives an incorrect answer. 0 points

4. Read the text on page 6 then ask:

“How do you think Michael felt when he got home from searching for Monkey?”

Scoring: Question 4

Child indicates that Michael is feeling sad, bad, upset, or provides an equivalent emotion related to loss. 1 point

Child gives an incorrect response (e.g. tired, wet) or says, “I don’t know.” 0 points

5. Continue reading until you reach page 11. Read the text on this page and increase the time you give the child to look at the pictures because the pictures and text together will help the child make the prediction. Ensure you have the child’s attention, then ask:

“What do you think is going to happen next?”

Scoring: Question 5

Child predicts bird will take Monkey or hurt or scare the hedgehogs. 1 point

Child provides an implausible response or says, “I don’t know.” 0 points

6. Continue reading until you reach page 14, then ask:

“Why do you think the crow dropped Monkey?”

Scoring: Question 6

Child says because Monkey was heavy, because the crow was tired or some other plausible answer.	1 point
Child does not respond, offers an implausible reason, or says, "I don't know."	0 points

7. Continue reading until you reach page 17, then ask:

"What do you think the man is going to do?"

Scoring: Question 7

Child gives a plausible response that recognizes the man as a toy maker. For example, says "cleans Monkey" or "tries to sell Monkey".	1 point
Child gives response that does not indicate knowledge of toy maker's profession.	0 points

8. Continue reading the text until page 19. Then ask:

"Can you tell me what the toy maker did first?"

When the child responds, ask for the next event by saying, ***"Then what did he do?"***

Ask for a third event in the sequence by saying, ***"Then what?"***

Scoring: Question 8

Child gives three sequential events.	3 points
Child gives two sequential events but cannot give more, or gives a non-sequential event, after probing.	2 points
Child gives one event but cannot give a sequential event, even after probing.	1 point
Child does not respond or says, "I don't know."	0 points

9. Continue reading until page 21, then ask:

"Why do you think Monkey was in the window?"

Scoring: Question 9

Child indicates that Monkey was for sale. 1 point

Child gives incorrect response or says, "I don't know." 0 points

10. Finish reading the book.

C) PRINT CONCEPTS -SECTION 2

Specific Instructions

Once the book reading is finished, proceed with the remaining three items related to print concepts.

1. Open the book to page 1 and say:

"Show me a word."

If the child points to the beginning of a word only, prompt the child by saying:

"Can you show me the whole word?"

Scoring: Word Identification

Child indicates a word on the page. 1 point

Child indicates multiple words, letter, or gives no response. 0 points

2. Next, say:

"Show me a letter."

Scoring: Letter Identification

Child indicates a letter. 1 point

Child indicates a word or provides no response. 0 points

3. Finally, turn to page 1 of the book.

Tell the child you are going to read the first part of the story again. Read the first sentence, pointing to each word as you say the word. ***"One autumn day, Michael woke Monkey up from his nap."***

Then say: ***"Read me the same sentence, pointing to the words as you say them."***

Scoring: Reading

Child repeats words and points to each word correctly.	2 points
--	----------

Child repeats words and points to words on the first line.	1 point
--	---------

Child is unable to do the task.	0 points
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Emergent Literacy Assessment is complete.

Step by Step Program Evaluation

Kindergarten Directors' Questionnaire

Joanne P. Brady

Julie A. Hirschler

Education Development Center, Inc.

Name of Kindergarten: _____

Name of Kindergarten Director: _____
Last First

City: _____

Country Code: ____ ____

Condition Code: ____ ____

Kindergarten Code: ____ ____ ____

STEP BY STEP EVALUATION Kindergarten Directors' Questionnaire

Instructions:

Dear Kindergarten Director:

Thank you for agreeing to complete this questionnaire that is a part of the Step by Step evaluation being conducted by Education Development Center. Please answer all questions independently and return the questionnaire to our research coordinator as soon as possible. We look forward to receiving this information from you.

SECTION 1: PROFESSIONAL BACKGROUND OF KINDERGARTEN DIRECTOR

1. How many years have you been a kindergarten director? _____ years
2. How many total years of formal schooling do you have? _____ years
3. Did you have specialized training to be a kindergarten director?
☐ yes ☐ no
4. Were you an early childhood teacher before becoming a kindergarten director?
☐ yes ☐ no
5. If yes, for how long? _____ years
6. Are you or have you been a psychologist/methodologist before becoming a kindergarten director?
☐ yes ☒ no
7. If yes, for how long? _____ years
8. How long have you been the director of this kindergarten? _____ years
9. How long has the Step by Step program been part of this kindergarten? _____ years
10. Have you been the director since the kindergarten adopted the Step by Step methodology?
☐ yes ☒ no
11. If no, how many other Step by Step directors has this kindergarten had?
☐ 1 previous director ☐ 2 previous directors ☒ More than 2 previous directors

12. Do you live in the same neighborhood where the kindergarten is located?

☐ yes ☐ no

SECTION 2. INFORMATION ABOUT YOUR PROGRAM

13. Does your kindergarten also include traditional classrooms?

☐ yes ☐ no

14. What is the total number of classrooms in your kindergarten? _____ classrooms

15. What is the total number of children in your kindergarten? _____ children

16. How many Step by Step classrooms are in your kindergarten? _____ Step by Step classrooms

17. What is the total number of children enrolled in Step by Step in your kindergarten?

_____ Step by Step children

18. Has your Step by Step enrollment increased over the past three years?

☐ yes ☐ no

19. If yes, how many Step by Step children were enrolled in the program during the:

a) 1996/97 school year: _____ children

b) 1997/98 school year: _____ children

c) 1998/99 current school year: _____ children

20. What is the age range of children enrolled in Step by Step?

_____ years old to _____ years old

21. What are the ethnic backgrounds of the children enrolled in the Step by Step program this school year?

Ethnic Group	Number of Children

22. How many children with disabilities are currently enrolled in your Step by Step program?

_____ children

23. What percentage of children attend the Step by Step program full-time? _____%

24. What percentage of children attend the Step by Step program part-time? _____%

25. How many hours per day does your kindergarten operate? _____ hours per day

26. What is the rate (%) of unemployment in the town/city where your Step by Step program is located?
Make your best estimate. Leave blank if you are unable to estimate.

_____ %

27. What is the rate (%) of unemployment among the families enrolled in your Step by Step program?

_____ %

28. What is the educational level among the families enrolled in your Step by Step Program?

- ☐ a) about 25% or less adults completed university/ pedagogical institute
- ☐ b) about 26-50% adults completed university/ pedagogical institute
- ☐ c) about 51-75% adults completed university/ pedagogical institute
- ☐ d) about 75-100% adults completed university/ pedagogical institute

29. What percentage of families in your Step by Step Program has a single parent as the head of household?

- ☐ a) about 25% or less
- ☐ b) about 26-50%
- ☐ c) about 51-75%
- ☐ d) about 75-100%

30. Is your kindergarten a Model Training Site?

- ☐ yes ☐ no

31. If yes, what services do you offer? (Check all that apply.)

- ☐ a) Provide training to interested teachers
- ☒ b) Provide training to interested administrators
- ☐ c) Provide general orientation to the Step by Step program
- ☐ d) Provide student teacher placements
- ☐ e) Provide follow-up technical assistance to replication sites
- ☐ f) Other. Please specify: _____

32. Does your kindergarten provide other services to the community?

- ☒ yes ☐ no

33. If yes, describe: _____

34. Please rate the following statements about your kindergarten BEFORE it adopted the Step by Step methodology. Check one of the four boxes provided with Box #1 (Not At All) having the lowest rating and Box #4 (Frequently) having the highest rating.

Statement	Not At All				Frequently			
	1	2	3	4	1	2	3	4
a) Staff meetings were held to discuss and decide important program issues.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Teachers expressed their opinions in staff meetings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Teachers planned together.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Teachers were involved in decisions about teaching methods and materials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Teachers were involved in making decisions about child assessment criteria.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Teachers were involved in making decisions about kindergarten policies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Teachers participated in workshops/training.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Teachers were involved in decisions about topics for workshops/training.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

35. Please rate the following statements about your kindergarten AFTER it adopted the Step by Step methodology. Check one of the four boxes provided with Box #1 (Not At All) having the lowest rating and Box #4 (Frequently) having the highest rating.

Statement	Not At All			Frequently
	1	2	3	4
a) Staff meetings are held to discuss and decide important program issues.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Teachers express their opinions in staff meetings.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Teachers plan together.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Teachers are involved in decisions about teaching methods and materials.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Teachers are involved in making decisions about child assessment criteria.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Teachers are involved in decisions about kindergarten policies.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Teachers participate in workshops/ training.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h) Teachers are involved in decisions about topics for workshops/training.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

36. Describe one example that illustrates the differences in the kindergarten before Step by Step and now.

Section 3: Relationship with Families

37. How does your kindergarten involve families? (Check all that apply.)

- ☐ a) Orientation for prospective families
- ☐ b) Open Door Day for families enrolled
- ☒ c) Regular meetings with teachers to discuss their child's progress (at least one per year)
- ☒ d) Conduct home visits
- ☒ e) Regular workshops on parenting/child development (at least twice per year)
- ☒ f) Workshops for parents on other topics. Please specify: _____
- ☐ g) Other. Please specify: _____

38. How do families donate their time and other resources to the Step by Step program? Where appropriate, indicate the percentage of families who contribute to each activity. *"Family" is defined as any member including grandparents, aunts, uncles, etc.* (Check all that apply and estimate the % in the space provided.)

Type	% of families
<input type="checkbox"/> a) Participate in the classroom	_____
<input type="checkbox"/> b) Organize events (e.g., performances, field trip)	_____
<input type="checkbox"/> c) Build outdoor play equipment	_____
<input type="checkbox"/> d) Make classroom furniture and materials	_____
<input type="checkbox"/> e) Assist with clerical work such as typing/copying	_____
<input type="checkbox"/> f) Assist with facilities maintenance and repairs	_____
<input type="checkbox"/> g) Organize fund-raising activities	_____
<input type="checkbox"/> h) Make cash contributions	_____
<input type="checkbox"/> i) Donate classroom supplies	_____
<input type="checkbox"/> j) Donate building materials (e.g., paint, wood)	_____
<input type="checkbox"/> k) Other. Please specify: _____	_____

39. Describe one example of parent participation in your Step by Step program of which you are particularly proud.

40. Is there a local Parent Association (or one with a similar name) that is registered by law to raise funds?

☐ yes ☐ no

If no, skip to question 46.

41. If yes, what, in addition to fundraising, is the function of this local Parent Association? (Check all that apply.)

- ☐ a) Advertising the program
- ☐ b) Sponsoring activities such as parent conferences
- ☐ c) Other. Please specify: _____

42. How many parents serve on the Parent Association? _____ number of parents

43. How often does the Association meet?

- ☐ Once a school year
- ☐ Twice a school year
- ☐ Once a month
- ☐ More than once a month

44. How are parents selected to serve on this Association?

- ☐ a) They offer to serve on the Association.
- ☐ b) They are elected by other parents.
- ☐ c) Other. Please explain: _____

45. What other ways does the Association work with the Step by Step kindergarten? (Check all that apply.)

- ☐ a) It provides *advice* to administrators about the operation of the program.
- ☐ b) It has *decision-making authority* about the operation of the program.
- ☐ c) It *establishes policies* about the operation of the program.
- ☐ d) None of the above.

46. Do you have a second parent group, separate from the Parent Association mentioned above, that works with your kindergarten?

- ☐ yes ☐ no

If yes, answer questions 47 through 51. If no, skip questions 47 through 51.

47. What is the function of this second parent group/committee? (Check all that apply.)

- ☐ a) Advertising the program
- ☒ b) Sponsoring activities such as parent conferences
- ☐ c) Fundraising
- ☐ d) Other. Please specify: _____

48. How many parents serve on this parent group/committee? _____ number of parents

49. How often does this parent group/committee meet?

- ☐ Once a school year
- ☐ Twice a school year
- ☐ Once a month
- ☐ More than once a month

50. How are parents selected to serve on this group/committee?

- ☐ a) They offer to serve on the group/committee.
- ☐ b) They are elected by other parents.
- ☐ c) Other. Please explain: _____

51. In what other ways does this parent group/committee work with the Step by Step kindergarten? (Check all that apply.)

- ☐ a) It provides *advice* to administrators about the operation of the program.
- ☐ b) It has *decision-making authority* about the operation of the program.
- ☐ c) It *establishes policies* about the operation of the program.
- ☐ d) None of the above.

52. How have families advocated on behalf of your Step by Step program? (Check all that apply.)

- ☐ a) Advocacy for *space needs*
- ☒ b) Advocacy for *retention* of the Step by Step program
- ☒ c) Advocacy for *financial support* of the Step by Step program
- ☒ d) Advocacy to *increase enrollment* of the Step by Step program
- ☒ e) Advocacy for *licensing* of the Step by Step program
- ☒ f) Advocacy to change *rules and regulations* that affect Step by Step

- ☐ g) Advocacy for the expansion of *program services* within your kindergarten (e.g., infant/toddler classroom)
- ☐ h) Advocacy to *traditional* kindergartens to adopt Step by Step methodology
- ☐ i) Advocacy to *primary* schools to adopt Step by Step methodology
- ☐ j) Other. Please specify: _____

53. To which groups have families' advocacy efforts been directed? (Check all that apply.)

- ☐ a) Directors of traditional schools
- ☐ b) Local city/town officials
- ☐ c) Businesses
- ☐ d) Local education authorities
- ☒ e) Ministry of Education
- ☐ f) Other. Please list. _____

54. Please describe one example of family advocacy for Step by Step of which you are particularly proud.

55. Are parents asked to evaluate the Step by Step program?

- ☐ yes ☐ no

56. If yes, are the parent evaluations anonymous?

- ☐ yes ☐ no

57. What does your parent evaluation include? (Check all that apply.)

- ☐ a) Level of satisfaction with your child's kindergarten experience
- ☐ b) Level of satisfaction with parent education activities
- ☐ c) Level of satisfaction with efforts to communicate the goals of the program to parents
- ☒ d) The extent to which parents feel invited to participate
- ☐ e) Questions that solicit suggestions from parents on ways to improve the program

SECTION 4: RELATIONSHIP WITH THE COMMUNITY

58. How do community members donate their time and other resources to the Step by Step program?
(Check all that apply.)

- ☐ a) Participate in the classroom
- ☐ b) Organize events (e.g., performances, field trip)
- ☐ c) Build outdoor play equipment
- ☐ d) Make classroom furniture and materials
- ☐ e) Assist in the office
- ☐ f) Assist with facilities maintenance and repairs
- ☐ g) Organize fund-raising activities
- ☐ h) Make cash contributions
- ☐ i) Donate classroom supplies
- ☐ j) Donate building materials (e.g., paint, wood)
- ☐ k) Other. Please specify: _____

59. Please describe one example of a community member's participation in your program of which you are particularly proud.

60. Do Step by Step community members show their support for Step by Step through advocacy?

- ☐ yes ☐ no

61. If yes, what kind of advocacy have community members provided? (Check all that apply.)

- ☐ a) Advocacy for *space needs*
- ☐ b) Advocacy for *retention* of the Step by Step program
- ☐ c) Advocacy for *financial support* of the Step by Step program
- ☐ d) Advocacy to *increase enrollment* of the Step by Step program
- ☐ e) Advocacy for *licensing* of the Step by Step program
- ☐ f) Advocacy to change *rules and regulations* that affect Step by Step.
- ☐ g) Advocacy for the *expansion of program services* e.g. infant/toddler classroom
- ☐ h) Advocacy to *traditional kindergarten* to adopt Step by Step methodology

- ☐ i) Advocacy to *primary* schools to adopt Step by Step methodology
- ☐ j) Other. Please specify: _____

62. Community members' advocacy efforts have been directed at which groups? (Check all that apply.)

- ☐ a) Directors of traditional schools
- ☐ b) Local city/town officials
- ☐ c) Businesses
- ☐ d) Local education authorities
- ☐ e) Ministry of Education
- ☐ f) Other. Please explain _____

63. Please describe one example of community advocacy for Step by Step of which you are particularly proud.

64. As you consider the broader community served by your kindergarten, what critical, additional needs for community services exist? Check all that apply and briefly explain each item selected.

- ☐ a) Health services, explain _____
- ☐ b) Services to the elderly, explain _____
- ☐ c) Adult education, explain _____
- ☐ d) Services to the disabled, explain _____
- ☐ e) Workforce development, explain _____
- ☐ f) Distribution of goods and services to low-income families, explain _____
- ☐ g) Other, explain _____

65. If additional funding were provided to meet the needs you identified above, could you envision your kindergarten becoming a center for such community activities?

- ☐ a) yes
- ☐ b) no
- ☐ c) We already do, explain _____

66. If yes, which needs would your kindergarten be most able to address if additional funds were provided. Check only from those items you selected in question 62.

- ☐ a) Health services
- ☐ b) Services to the elderly
- ☐ c) Adult education
- ☐ d) Services to the disabled
- ☐ e) Workforce development
- ☐ f) Distribution of goods and services to low-income families
- ☐ g) Other, explain _____

Thank you.

Please return to:

Vira Kuzmenko, Research Coordinator, Step By Step Program, Ukraine

Viorel Nicolescu, Research Coordinator, Step By Step Program, Romania

Tokon Orusbaeva, Research Coordinator, Step By Step Program, Kyrgyzstan

Mario Marinov, Research Coordinator, Step By Step Program, Bulgaria

Overview

Interview with the Ministry of Education

Purpose

The purpose of this interview is to learn about the nature and extent of the collaboration between the Step by Step program and the Ministry of Education in each country. Consistent with the stated purposes of the evaluation, the protocol is designed to gather data on the impact of the program on educational policy and practice. It is also designed to help answer research questions that focus on community impact and sustainability.

Approach

The research coordinator in each country will conduct a 2 to 3 hour, structured interview with a representative(s) of the Ministry of Education. The respondent will be selected in consultation with the Step by Step country team. The interview is constructed to gather information that is common across all four countries in the sample as well as to elicit information that captures the unique collaborative efforts in each country.

Country team members and research coordinators will work collaboratively with U.S. researchers to finalize the interview protocol during the cross-country research meeting. There are two important reasons to generate the final protocols in the context of the research meeting. First, this approach enables country teams to identify unique characteristics of their efforts with the Ministry so that interview questions can be constructed to capture these data. Second, the same discussion will equip research coordinators with a deeper understanding of the situation in each country. The stronger the research coordinator's understanding, the more able he or she will be to probe effectively for more complete information.

During the cross-country research meeting, the following decisions were made concerning respondents.

- Bulgaria: One respondent at ministry level
- Kyrgyzstan: One respondent at ministry level and one at regional/local level
- Romania: One respondent at ministry level and one at regional/local level
- Ukraine: Two respondents at ministry level and one at regional/local level

In addition to collecting background data on the respondents, the protocol will cover three major areas:

Collaboration. One portion of this set of questions will focus on the nature and extent of the collaboration with the Step by Step program. These questions will gather information on the respondent's historical view of the working relationship, how it has changed over the years, and the factors that have contributed to this change. Additional questions will focus on nature and extent of collaboration, including the nature of support received from and given to the Step by Step program as well as joint efforts.

Policies. This set of questions will address the degree to which Step by Step has made an impact on educational policy and practices within the country. Questions will probe for both formal and informal impact. In order to place the impact in a context, information will be gathered about current challenges and priorities.

Future Directions. This set of questions gathers information about the future challenges and priorities that the Ministry official envisions for education reform in the country. Some questions will focus on gathering information about the respondent's perspective on how Step by Step fits in this view of the future. Some avenues pursued in this line of questioning are thoughts on the training of teachers in a democratic society, the role of education reform in establishing a civil society, and the broader adoption of the Step by Step methodology.

Role of the Research Coordinator

The Research Coordinator will contact the respondent to introduce herself/himself, explain the purpose of the interview, and to set up a mutually agreeable time and place. So that the Ministry official will have ample time to reflect on the issues addressed in the interview, the Research Coordinator will send an advance copy of the interview protocol. It is standard procedure for the advance copy to reach the respondent at least three days prior to the interview appointment.

The tone of the interview should be cordial and solicitous of the respondent opinions and ideas. It is important to remain neutral and non-judgmental in both verbal comments and demeanor. This requires careful listening and achieving a balance between accepting a response and probing for a more complete, in-depth answer.

Even though the interview is likely to be memorable, it is critical to take careful notes. In the U.S. it is often acceptable to tape record the interview, especially one of this length. The research coordinator should ask the respondent beforehand if s/he would agree to having the interview recorded. The tape does not replace careful notetaking during the interview for a number of reasons. First, the tape is used primarily as resource to remind the interviewer of a particular exchange. Notes have a way of helping the interviewer make sense of the statements at the time. Second, notes assist the interviewer in tracking issues to return to and probe with respect to other questions in then protocol. Notes also are an important aid in organizing the summary and major themes immediately following the conclusion of the interview.

It is vital to write a draft summary of the interview **immediately following** its conclusion. A night's rest can blur the recall of even a very experienced interviewer. The interview protocol itself is essential in giving structure to the interview summary. Summarize the response beneath each question. In addition think about the entire interview and extract several major themes that best characterize the respondent's

opinions about collaboration, Step by Step's impact on policy, and Step by Step's influence on the future direction of education.

Once this first draft is completed, the research coordinator will refine the summary with additional reviews. Once the research coordinator is satisfied with the summary, it should be translated into English, reviewed and forwarded to EDC. The research coordinator should retain a copy and all of the backup notes and drafts in the event that further clarification is required.

Step by Step Evaluation Ministry Interview

Name of respondent: _____

Title of respondent: _____

Address of respondent: _____

Audio-taped: Yes ☐ No ☐

Brief description of respondent's general responsibilities:

Length of time in position: _____ years

Background/Experience: _____

Others present? Yes ☐ No ☐

If yes, names and positions:

Name	Position
------	----------

1)

2)

Name of interviewer: _____

Date of interview: _____

Start time: _____

End time: _____

Location of interview: (check one)

☐ Respondent's office☐ Meeting room in Ministry☐ Other (Specify): _____

Country Code: ____

I. Interview Focus: Collaboration

- 1) How long have you been familiar with the Step by Step program?
- 2) How did you first learn about the program and from what source?
- 3) What component of the Step by Step program do you find most important to your goals for education? Why?

Parent involvement?

Organization of space and materials for child choice?

New pedagogical practices?

Additional staff in the classrooms?

- 4) To what extent do you feel well informed about the program? What regular information do you receive?
- 5) How has the Ministry participated in the Step by Step program? How frequently?

Training and/or conferences?

Planning meetings?

Site visits to local kindergartens?

Informal contacts?

- 6) In what ways has the Ministry supported the Step by Step program?

With resources and information? A specific example from this past year?

With financial support? A specific example?

Providing opportunities for the growth and development of the program? (e.g., established official relationship, teachers paid while receiving training, provided permissions/waivers, contracts)

- 7) In what ways has the Step by Step program supported the goals and priorities of the Ministry? (e.g., providing literature on democratic education and child-centered methods) Probe for specific examples.
- 8) Have the Ministry and Step by Step collaborated on specific projects together? What is the nature of these projects, the role of each organization, and the outcome?

- 9) As you think back over the past few years, how has your working relationship with Step by Step changed? Is there an example that best illustrates this change? To what do you attribute this change (i.e., factors that influenced this change)?

II. Interview Focus: Policies

- 10) In what ways have the practices of Step by Step influenced the practices in early childhood education within the country? (e.g. learning through play, environment for play, involvement of parents, grading)
- 11) I would like to learn more about the Ministry's priorities for education reform, especially as these policies affect young children.
- 12) How has Step by Step influenced the Ministry's policies?
- What informal examples exist?
- What formal examples exist?
- 13) Are there other reform (alternative) programs similar to Step by Step operating within the country? If so, describe their approach and your perceptions of their success. (Limit time here.)
- 14) Can you comment on the compatibility of the Step by Step methodology with your current policies and practices?
- 15) How do you assess the effectiveness of the Step by Step Program?

Its current strengths?

Its current weaknesses?

III. Interview Focus: Future Directions

16) I would like to learn more about the Ministry's future directions for education reform.

What do you see as the future challenges affecting education?

What new priorities do you expect to set for the coming years?

17) How do you see Step by Step fitting into these future directions and contributing to these goals?

18) How does Step by Step influence other major educational institutions, such as higher education, pedagogical institutes/high schools, and teacher retraining programs?

19) How does Step by Step influence other educational NGOs?

20) As you think about the future, how would you assess the Step by Step program?

What particular strengths do you think Step by Step possesses that will sustain the program in the future?

What particular weaknesses do you think Step by Step must address in order to be prepared for the future?

GUIDELINES FOR CONDUCTING INTERVIEWS WITH MINISTRY REPRESENTATIVES

General Directions

- 1) Set up the interview with the ministry representatives identified at the cross-country research meeting in Budapest, Hungary. Remember to ask if you can tape record the session and tell respondents that the interview will last 3 hours. It is likely to take less time but it is important that you do not exceed the amount of time planned for. Inform the respondent that you will send a copy of the interview protocol beforehand. Remember our discussion about the location of the interview, the need for privacy and lack of interruptions.
- 2) Have the interview and accompanying materials translated.
- 3) Mail or deliver a copy of the interview questions to respondent(s) at least three days prior to the interview appointment.
- 4) Interview the Director of the Step by Step country team to find out as much as possible about the Step by Step relationship with the Ministry of Education at the national level and at the local level, where appropriate.
- 5) Study the interview questions so that you are completely familiar with them and can easily make transition. Also when an interviewer is thoroughly familiar with the questions, he/she can pace the interview and recognize when a respondent has already answered a question.
- 6) Devise a system for checking off questions so that you will know, at a glance, if the question was completely answered.
- 7) Test the tape recorder before arriving. Have enough tapes on hand as well as extra batteries.
- 8) Also complete as much of the cover sheet for the interview ahead of time. **DO NOT START THE INTERVIEW WITH THE COVER SHEET QUESTIONS.** Some will be answered in the course of the conversation. At the end of the interview, make sure all items on the cover sheet are completed accurately.
- 9) Upon arrival, check the tape recorder set up once again to be sure that it is recording. Introduce yourself, thank the respondent once again for their time, review agreements made previously about timing, then begin.
- 10) Remember the interviewing techniques shared at the meeting. Refer to the handout for more specifics.

- 11) Before thanking the respondent, check to see if all interview questions were thoroughly addressed.
- 12) Once back at your office, send a thank you letter to the respondent(s).
- 13) On the same day, review and organize your notes so that responses appear in full under each question. Use the tape as a reminder for details. See below for specific instructions for report writing.

Writing Your Reports

For each respondent, EDC must receive two different translated documents: (1) the organized interview notes and (2) the final report of the interview. In those countries where two or more interviews are conducted, Research Coordinators are required to write a short report that communicates areas in which respondents agree and disagree. Specific instructions for the different types of reports appear below.

Report #1: Organized Notes

This report should be completed for each respondent. In this report, research coordinators transcribe and organize their handwritten notes beneath each question in sentence form. Wherever possible, examples provided by the respondent during the interview are elaborated on. Detailed examples will be important for all reports since they provide pictures and illustrations of points made that are memorable and will be useful for the final research report. A translated cover page should be the first page on this report. The length of this report should be between 12 and 15 pages.

Sample Excerpt of an Organized Notes Report

In what ways have the practices of Step by Step influenced the practices of early childhood education within the country?

The Minister suggested that Step by Step has been very influential over the past few years, especially over this last year. She provided the following examples. When the methodology was first explained, we were skeptical about the amount of time children played. With experience, we came to realize that this play was purposeful and provided children with unique and valuable ways of learning about the world. Through workshops offered by Step by Step more teachers (outside of the S/S system) are paying attention to children's play.

A similar situation has occurred with parents. "In the past, we were very wary of parents in our kindergartens. Would they know the difference between their role and that of a trained and experienced teacher?" Now people are accustomed to hearing about parents who are active in Step by Step and see all of the benefits the program receives as a result. So they want to copy this because they see advantages.

The Minister was quick to add that no practices change without some policy changes. See the response to question x for more detail.

Report #2: Final Interview Analysis

This report should be submitted for each interview completed. The report should be typed and double spaced. It is essential throughout the report to differentiate your assertions as the researcher from those made by the respondent. Be clear use simple sentence structure that enables the essence to be translated accurately. It should contain the following information organized by the subheading which appear in **bold face** below.

Cover Page (1 page)

General Tone. (1/2 page to 1 page)

In this section describe the overall tone of the interview. Note how open the respondent was and whether the questions were answered completely without avoidance. Describe any instances where the respondent seemed reluctant to answer the questions posed. Relate whether the interview proceeded smoothly, the nature and extent of interruptions, and if events occurred which may have jeopardized the quality of the interview.

Relevant Context. (1 page or less; can be the same for all respondents)

Describe briefly education reform activities that are underway in your country. This provides a background for interpreting the remainder of the report on this interview.

Collaboration. (3-4 pages)

In this section identify the most critical themes that emerged during the interview on collaboration. It is important to consider the respondent's answers to all of the questions in this section. Then identify 2 or 3 major topics or patterns that reveal important insights on the perspective of the respondent on the nature and extent of the collaboration with Step by Step. As you make assertions, be sure to support your assertions with specific examples drawn from the interview. Use quotes whenever the respondent's words can add to the reader's understanding.

Policies. (3-4 pages)

In this section identify the most critical themes that emerged during the interview on Step by Step's impact on policy. It is important to consider the respondent's answers to all of the questions in this section. Then identify 2 or 3 major topics or patterns that reveal important insights on the perspective of the respondent on the degree to which Step by Step has influenced policy and practice. It is important to note the balance between informal and formal influences on policy. As you make assertions, be sure to support your assertions with specific examples drawn from the interview. Use quotes whenever the respondent's words can add to the reader's understanding.

Future Directions. (3-4 pages)

In this section describe the most important ways in which the respondent sees Step by Step or its influence fitting into the educational future of his/her country. This influence will necessarily take into consideration the particular challenges and priorities of that country. Identify examples of 2 or 3 ways in which Step by Step's influence might be felt in the country's policies and practices in the future. . As you make assertions, be sure to support your assertions with specific examples drawn from the interview. Use quotes whenever the respondent's words can add to the reader's understanding.\

Conclusion (1 page)

In this section, think across the interview to the most important findings and/or insights that the interview revealed about the relationship between Step by Step and the Ministry of Education.

Report #3: Analysis Across Interviews

The purpose of this brief report (maximum 3 pages) is to identify convergence and divergence of perspectives on the Step by Step program, across multiple respondents. All Research Coordinators, must submit one of these reports (except in Bulgaria where only one interview will be conducted).

**PARTICIPATORY RESULTS-ORIENTED SELF-EVALUATION
(PROSE)**

STEP BY STEP PROGRAM EVALUATION

Education Development Center, Inc.
1998

Instructions for Administering PROSE

Guidelines

1. When translating the instrument and score form, be sure to keep items in the same order. This is important for our data input and analysis.
2. You should invite at least 5-7 persons to participate in the PROSE discussion and rating session. It is important to stay within this guideline in order to facilitate an optimal discussion. These persons must work as part of the core/country team.
3. Conduct the discussion in a location in which you can remain uninterrupted during the course of the discussion.
4. Remain within the 5-10 minute guideline for each discussion set. The first sets might take somewhat longer since the group is becoming accustomed to the process. If you exceed this timeframe, participants might become fatigued by the end of the session.
5. Remember that the purpose of the discussion is to elicit events and ideas but not to come to consensus.
6. Remind participants not to look ahead at the numbered items to be rated or subsequent discussion sets.
7. The PROSE facilitator should be very familiar with the entire instrument before beginning to facilitate the discussion. One of the important reasons for this is that some discussion points will reappear in later sections. To make the discussion coherent, then, the facilitator needs to refer back to previous sections and to write salient points on newsprint.
8. The PROSE facilitator should write down salient points on newsprint/sheets of large paper. The purpose of this is to remind participants of the discussion when rating related items. Another purpose is to use these newsprints as a reference for later discussions.
9. Remember that comments during the discussion need to be strictly on the topic. If the discussion deviates from the topic at hand, you will not be able to complete the instrument in a reasonable amount of time.
10. Finally, and very importantly, ratings are INDIVIDUAL AND PRIVATE. Names of participants should not appear on the score form. Each person decides for him/herself what the rating should be. Participants will rate each item on a 5-point scale according to their agreement or disagreement with the statement. Ratings should be completed in pen and not in pencil.

11. When the discussion/rating sessions are finished, please send the score form back to EDC. No translation is necessary.

Directions

All 103 numbered, **bold-faced items** should be scored individually by each member of the team. Use the following scale which appears on the accompanying score sheet: 1=strongly disagree; 2=disagree; 3=neutral; 4=agree; 5=strongly agree.

Questions that appear under the heading "discussion," should be addressed through facilitated, whole group review. Team members should spend *approximately* five to ten minutes considering *each set* of discussion questions as a whole group. Despite the fact that discussion questions appear as a *set*, they should be addressed sequentially, one by one. Each team member should score numbered items that follow each discussion question *individually* before the facilitator invites the group to consider the next set of discussion questions. Team members **must participate in the full set of structured, group discussion questions in order to submit their answer sheets for scoring.**

Organizational Learning for Quality Control (23)

These items focus on two factors that lead to program quality: the degree to which information is used to improve program performance and the use of procedures to track progress and assess impact.

Discussion Set:

- a) List the three most important objectives of the Step by Step program.
- b) How do we track our progress in reaching these three most important objectives?
- c) As we set priorities, to what extent do we consider the strengths and needs of the kindergartens we serve?

- 1. **We systematically track the degree to which Step by Step program objectives are being achieved in the *kindergartens* which we support.**
 - 2. **We have developed an effective method to track the degree to which program objectives are being achieved in kindergartens.**
 - 3. **We have standard and useful procedures to evaluate how *kindergarten teachers* implement the Step by Step methodology in their classrooms.**
 - 4. **We have standard and useful procedures to determine how local kindergartens *involve families*.**
 - 5. **We routinely assess the degree to which our activities have a positive impact on local kindergartens' ability to improve the quality of their services.**
-

Discussion Set:

- a) Think about the last two site visits we conducted to kindergartens. What support services did we provide during these visits? Training? Technical assistance? Others?
- b) What procedures helped us to determine which services to provide to these kindergartens?
- c) How did we determine whether the support services we provided during these site visits were successful?

- 6. **We have established clear criteria that can be used to assess the extent to which we, the members of the country team, are providing quality support services to kindergartens.**
- 7. **We regularly use these criteria to measure the quality of our support to local kindergartens.**
- 8. **The frequency of our site visits to kindergartens is explicitly related to our assessment of their need for support in implementing the Step by Step methodology in classrooms.**
- 9. **The frequency of our site visits to kindergartens is explicitly related to our assessment of their need for support in implementing parent involvement activities.**

10. The frequency of our site visits to kindergartens is explicitly related to their assessed need for support with administrative issues.

Discussion Set:

- a) Consider the support we have provided kindergartens over the past year. List one important way that Step by Step has had an impact on participating *children*, their lives and development.
- b) List one important way our program has had an impact on the *families of participating children*.
- c) List one important way in which our program has had an impact on the *communities of the participating families*.
- d) What type of program impact is most commonly assessed by our team, for example, impact on participating children, impact on families of children, and/or impact on communities where they live?
- e) How do we know that the information that we have collected from kindergartens as we provide support is valid and timely?

11. We *periodically* compile the information that each team member gathers during individual field visits so that we can detect broad trends affecting the kindergartens we support.

12. We *routinely* conduct assessments to learn whether kindergartens are achieving the intended impact on the lives of *participating children*.

13. We *routinely* conduct assessments to learn whether kindergartens are achieving the intended impact on the *families* of participating children.

14. We *routinely* conduct assessments to learn whether kindergartens are achieving the intended impact on the *communities* of participating families.

15. We assess the quality of the information generated by our staff when making site visits.

Discussion Set:

- a) What ethnic minorities participate in our Step by Step program across the country?
- b) Over the last 12 months, what instances can we identify where we tracked the participation of these ethnic groups in the Step by Step program.
- c) In each of these instances, did we generate information on the degree to which these ethnic groups benefited from the program?

16. We *routinely* assess the degree to which families from different ethnic groups participate in activities of our Step by Step kindergartens.

17. We *routinely* track the degree to which different ethnic groups derive educational, health or psychosocial benefits from kindergartens that we support.

Discussion Set:

- a) Over the last six months, what specific examples can we identify where our country team activities promoted an exchange of information and ideas among Step by Step program staff from different kindergartens, e.g., newsletters, meetings, mentoring programs, etc.?
- b) To what extent are these efforts part of an ongoing networking strategy?
- c) What information do we have that these exchanges among kindergartens have resulted in positive program changes?

18. We *regularly* employ strategies that are designed to encourage the exchange of information and ideas among kindergarten directors.

19. We *regularly* employ strategies that are designed to encourage the exchange of information and ideas among teachers from different kindergartens.

20. We *systematically* assess the impact of our networking strategy on the implementation of the Step by Step methodology.

Discussion Set:

- a) What are three important criteria we consider in selecting kindergartens for expansion?
- b) Consider the last two kindergartens that we added to our Step by Step Program. To what extent have we used these three criteria in selecting these two kindergartens?
- c) How did we ensure that our selection process was fully and openly communicated to all applicants in our last round of expansion?

21. We have developed standard eligibility criteria and use them when selecting new kindergartens for expansion.

22. We always provide prospective applicants with written information on our criteria for selecting new kindergartens for inclusion in the Step by Step program.

23. Applicants for expansion that are not selected receive information from us that helps them to understand the reasons for our decision.

Teamwork (16)

This capacity area focuses on the degree to which the program staff shares goals and responsibilities, and exercises democratic principles. This area will also address meeting behaviors within the country teams and at the national level, i.e., conduct and frequency, meeting effectiveness. This capacity area also focuses on the information flow within the program as well as the quality, timeliness, and utility of information needed to support high performance by team members.

Discussion Set:

- a) What are two or three of our team's current priorities?
- b) What information must be shared among us (country team members) to respond effectively to these priorities?
- c) Within the last six months, to what extent has this information been available to the appropriate members of our country team in a timely fashion?
- d) In what directions did this information flow in order to reach you—from the top down, from the bottom up, or horizontally?

24. Appropriate information is openly shared throughout our country team.

25. All appropriate team members have adequate information to respond to our priorities.

26. Appropriate information is shared in timely manner.

27. All members of our country team *routinely* have the information they need to do their jobs effectively.

28. Information flows freely to and from all country team members.

Discussion Set:

- a) How many team meetings have we convened over the last 2 months?
- b) How many of these meetings were characterized by having *open* discussion in which all appropriate team members participated?
- c) What are some specific examples of learning that emerged from these meetings?
- d) What are some examples where we applied what we learned in our team meetings to improve our support to kindergartens?

29. We hold *regular* team meetings to discuss issues that affect our work with kindergartens.

30. During our country team meetings, participants listen respectfully to one another.

31. Our country team meetings *usually* involve extensive discussion and input from all appropriate country team members.

32. Discussions we have at country team meetings *directly* enhance the quality of our support to kindergartens.

Discussion Set:

- a) What are two or three *job-related* challenges faced by individual members of our team over the past six months?
- b) For each of these *job-related* challenges, what examples do we have where the *individual* facing the challenge received support from other team members?

33. Members of our team *routinely* help one another to meet *job-related* challenges.

34. Members of our team *routinely* give priority to team needs rather than to *individual* considerations.

Discussion Set:

- a) Over the last 12 months, what is the greatest challenge our country team has faced?
- b) How have we organized ourselves to meet this challenge?
- c) To what extent have we shared responsibility for meeting this challenge?
- d) To what degree did our team leader's decisions concerning this challenge reflect input provided by team members?

35. We use teamwork effectively to respond to country team challenges.

36. We *routinely recognize* the interdependence of team members when trying to solve problems.

37. We *routinely involve* all appropriate country team members in *decisions* about how we should accomplish our major priorities.

38. Our leadership effectively uses staff input to strengthen decision-making.

39. Our leadership's decision-making process is openly communicated to country team members.

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Staff Development (16)

Items in this capacity area focus on staff training: how often it is offered, the degree to which it contributes to the program's objectives, and the degree to which kindergarten staff has input in the content and evaluation of training sessions. This area will also address the degree to which Step by Step methodologies, introduced at the country team level, are available to all kindergartens.

Discussion Set:

- a) What have been the three most important priorities for our team over the last 12 months?
- b) Over the same period, what training opportunities have been available to our team members?
- c) How did we determine what training opportunities should be available to members of our team?
- d) To what degree have our training opportunities helped us meet team priorities?

40. We have a system for assessing the training needs of our own team members.

41. All members of our team receive training or other assistance that is useful to them in performing their jobs.

42. The training received by our own team members *directly* contributes to achievement of our team's priorities.

Discussion Set:

- a) Consider recent interactions between the country director and other team members. Select two that are typical.
- b) How did these interactions help team members meet team objectives?
- c) To what degree does staff set goals for their individual performance together with their supervisors?

43. Our supervisory practices enable individual team members to contribute to our team's objectives.

44. The country director and individual team members work collaboratively to set individual performance goals and objectives.

Discussion Set:

- a) Identify three typical training events that we have sponsored at local kindergartens over the last 12 months?
- b) How did we determine the learning needs of the participants prior to these training events?
- c) For each of these events, what were the contributions of kindergarten staff in the planning the training activities?

- 45. We have a system for assessing the learning needs of kindergarten staff prior to planning training activities.
 - 46. We involve *kindergarten directors* in the *design* of most training activities in which they or their staff participate.
 - 47. We involve *teachers* in the *design* of most training activities in which they participate.
-

Discussion Set:

- a) What were the objectives of these three typical training events we offered?
- b) To what extent were the training objectives communicated to the participants?
- c) How were participants of the training events helped to master these new skills?

- 48. Training participants *routinely* receive a clear, written statement of the learning objectives for training events.
 - 49. Whenever a new skill is introduced through training, participants are given the chance to practice that skill during the training session.
 - 50. Whenever participants practice a new skill in training, they receive immediate feedback on how well they have mastered that skill.
-

Discussion Set:

- a) For each of the same three training events discussed above, what types of evaluations were conducted at the end of the training event? Who participated in these evaluations? Highlight one key evaluation finding from each of the training events.
- b) What kind of information do we need to determine the quality and impact of our training events?
- c) Over the past 12 months, what examples do we have where information drawn from evaluations of previous training events shaped subsequent training events?
- d) What differences, if any, exist between the evaluation information we obtain from teachers and the evaluation information we obtain from kindergarten directors?

- 51. *Kindergarten directors* provide *written evaluations* of every training event in which they participate at the end of the event.
- 52. *Kindergarten teachers* provide *written evaluations* of every training event in which they participate at the end of the event.
- 53. We have *strong* evidence, gathered through systematic evaluation, that our kindergarten teacher training events contribute *significantly* to the quality of the Step by Step program.

54. We have *strong* evidence, gathered through systematic evaluation, that our training events for kindergarten directors contribute *significantly* to the quality of the Step by Step program.

55. We *routinely* use information gathered through the evaluation of past training events to help us design future training activities.

Sustainability (25)

This capacity area focuses on program sustainability with regard to institutional and political support, funding and resource management, cultural support and the ability to shape institutional values and influence policy to support the Step by Step methodology. This capacity area also examines the ability of the program to forge meaningful alliances with other entities for sustainability.

Discussion Set:

- a) Consider the Model Training Sites we have instituted in the country. What are three ways we ensure the quality of the services they provide to others on the Step by Step methodology?
- b) How do we make decisions about the resources and support we provide to each Model Training Site?
- c) How do we publicize the services of the Model Training Sites to interested persons and organizations?
- d) Who is responsible for implementing these activities?

56. We support the Model Training Sites through appropriate and timely training and with other resources.

57. We regularly assess the quality of the services provided by Model Training Sites.

58. We regularly receive reports from Model Training Sites on the nature and extent of their activities and use this information to monitor quality and revise our plans for providing support to them.

59. We use effective strategies to publicize the services of Model Training Sites.

60. We promote the exchange of effective training and marketing strategies among Model Training Sites in our country.

61. Our approach to supporting the development of Model Training Sites is clearly understood by appropriate country team staff and personnel at the Model Training Sites.

Discussion Set:

- a) With what teacher training institutions e.g., universities, pedagogical institutes, have we worked with over the past six months?

- b) In what ways are the faculty and students of these institutions able to gain experience with the Step by Step methodology, e.g., materials, training, new courses, and practicums in Step by Step classrooms?
- c) How do we know whether the Step by Step methodology is being incorporated into teacher training programs?

62. We routinely inform faculty of teacher training institutions about our work and our achievements.

63. We have a systematic plan for influencing teacher training in higher education within our country.

64. Our work with faculty includes all of the following activities: introduction of new course content, training on Step by Step teaching methods, and support of research related to child-centered teaching.

65. We routinely receive feedback on the adoption of the Step by Step methodology in all the teacher training programs in which we work.

Discussion Set:

- a) What are the most important issues around which we have interacted with the Ministry of Education (national)?
- b) What have been the effects of these activities for Step by Step?
- c) What have been the effects of these activities on the Ministry's policies?

66. We regularly provide information to representatives from the Ministry of Education about our work and our achievements.

67. We regularly seek out opportunities to work collaboratively with the Ministry of Education in support of shared objectives.

68. We regularly implement activities collaboratively with the Ministry of Education to accomplish shared objectives.

69. Our work with the Ministry of Education has resulted in significant outcomes for the development of the Step by Step program.

70. Our work with the Ministry of Education has resulted in identifiable influences of Step by Step methodology on Ministry policy.

Discussion Set:

- a) In what ways have we developed positive working relationships with local education authorities?
- b) How have these activities benefited Step by Step kindergartens?

- 71. We routinely work with local education authorities to keep representatives informed of our activities (e.g., new program development, training)**
 - 72. We promote collaboration between Step by Step kindergartens and their local education authorities.**
 - 73. Our work with the local education authorities has resulted in significant benefits for Step by Step programs at the local level.**
 - 74. Our work with local education authorities has resulted in identifiable influences of the Step by Step methodology on policy.**
-

Discussion Set:

- a) How have budgetary resources been allocated to support your team's priorities?
- b) How do we track expenses against budgetary projections?
- c) What budget information is available to appropriate team members?

- 75. Our budgeting process leads us to allocate funds in a way that closely reflects our team priorities.**
 - 76. We regularly use established procedures to maintain a balance between revenue and expenses.**
 - 77. Appropriate team members have access to relevant budget information including funds available and funds expended in relation to the budget.**
-

Discussion Set:

- a) To what extent is our program's viability dependent upon the continued support of OSI (NY and in-country foundation)?
- b) What discussions have we had, in the last 12 months, to secure additional means of support (e.g., new funders, selling services or materials)?
- c) What decisions were made as a result of these discussions?
- d) How successful were we in acting on our decisions?

- 78. We take concrete measures to expand the base of our financial support by approaching new local or national funding sources.**
- 79. We take concrete measures to expand the base of our financial support by approaching new international donors.**
- 80. We take concrete measures to expand our financial support by selling services and materials for a fee.**

Innovation (23)

Items in this capacity area concentrate on the team's ability to adapt to changes in the external environment, modify objectives or operations, and use evaluation information for continuous program improvement. Items also address how creativity and initiative are encouraged and respected.

Discussion Set:

- a) Identify two significant changes in our external environment that have influenced our work over the past two years (Examples might include the economy, specific policies, changes in Ministries, etc.).
- b) How did we come to understand these changes and their impact on our program?
- c) Does our current strategic plan address these issues?
- d) Does our current strategic plan give appropriate guidance to staff on how to effectively use time and resources?

- 81. We keep informed about social, political, and economic trends/needs that affect our work.**
 - 82. We develop strategic objectives that reflect these social, political, and economic trends/needs that affect our work.**
 - 83. We adapt our program strategies to reflect social, political, and economic trends that affect our work.**
 - 84. We *periodically* prepare plans that give us specific guidance on how we should use our time and other resources.**
 - 85. Our everyday activities are *usually* consistent with these plans.**
-

Discussion Set:

- a) What are some improvements that we have made to our Step by Step program over the past year?
- b) What information led us to make these improvements?
- c) What process did we use to get information that we used to make these improvements?
- d) To what extent did this information come from teachers? Kindergarten directors? Parents? Community members? OSI, CRI, and the members of the Step by Step international network? Other professionals?

- 86. Our team *actively* seeks out suggestions from *kindergarten directors* about how we can improve our performance.**
- 87. Our team *actively* seeks out suggestions from *kindergarten teachers* about how we can improve our performance.**
- 88. Our team *actively* seeks out suggestions from *parents* about how we can improve our performance.**
- 89. Our team *actively* seeks out suggestions from *community members* about how we can improve our performance.**

90. Our team *actively* seeks out suggestions from OSI, CRI, and the members of the Step by Step network about how we can improve our performance.
91. Our team *actively* seeks out suggestions from *other professionals* about how we can improve our performance.
-

Discussion Set:

- a) What are three most important findings from evaluations we conducted during the most recently concluded program year? (Note to research coordinator: this should not include Phase I of this USAID-funded evaluation.)
- b) What changes to our activities and services, if any, have we made on the basis of these findings?
- c) To what degree have these changes been implemented in all kindergartens that could benefit?

92. Our monitoring and evaluation efforts produce *useful* findings to guide future activities that will enhance our strategic objectives.
93. We modify our activities and services to reflect what we have learned through our monitoring and evaluation work.
94. Appropriate members of our team are knowledgeable about findings drawn from our monitoring and evaluation work.
95. We systematically implement appropriate program changes that are indicated by our evaluation activities.
96. We assess progress in implementing program changes.
-

Discussion Set:

- a) To what degree did our staff meetings during the past month include the expression and discussion of dissenting opinions on program improvement?
- b) Over the last twelve months, what examples of innovation did we implement that *significantly* depart from our past practices?
- c) What supports innovation? Risk-taking individuals? Or a team atmosphere that encourages members to take risks?

97. Members of our team *frequently* offer suggestions for how we can improve the quality of our program.
98. When team members offer suggestions for how we can improve the quality of our program, their ideas receive *serious* consideration.
99. Even when team members know that their suggestions for improvement do not *initially* have support from others, they generally feel comfortable proposing them for discussion.
100. Our team is a safe place for staff to take risks and experiment with innovative ideas.
101. We experiment with innovations that are *significantly different* from our team's usual way of operating.
-

Discussion Set:

- a) Over the last 12 months, what are two or three significant decisions that we have made?
- b) What was the process we used to make these decisions?
- c) Who participated in this process?
- d) To what degree did we consider alternative solutions before making a final decision?

102. Our team *routinely* generates more than one possible solution to problems that we encounter in the course of doing our work.

103. We work as a team to assess alternative solutions to problems we encounter in the course of doing our work.

Teacher Beliefs and Practices Survey

Thank you for agreeing to complete this Teacher Beliefs and Practices Survey. It will take about 20 minutes to complete.

When you have completed the questionnaire, please return to the Research Study representative according to the arrangements that have been made with you.

Thank you for your participation in this study.

Codes: For Data Collectors' Use Only

Country: ____ ____

Condition: ____ ____

Kindergarten: ____ ____ ____

Classroom: ____ ____ ____ ____

Role: ____ ____

Teacher: ____ ____ ____

I. YOUR BACKGROUND

1. What is the official title of your position? Circle one: teacher assistant teacher
2. How long have you had your teaching job in this kindergarten? _____ years _____ months
3. How long have you taught kindergarten-aged children? _____ years _____ months

4. Training.

- a) How many total years of formal schooling do you have? Circle the best answer:

6 - 8 years 13 years 15 years 17 years
 9 - 12 years 14 years 16 years other: _____

- b) Do you have specialized training to be a kindergarten teacher? YES NO

If you do have specialized training, how many years did this training require? _____

What is your highest completed educational degree? _____

5. What is your ethnic background? _____

6. What is your gender? _____ female _____ male

7. What are the ages of the children in your current classroom? (**Indicate the number of children in your classroom who are in the age categories listed.**)

_____ younger than 5 years old

_____ 5 years old

_____ 6 years old

_____ 7 years old or older

_____ **Total number of children in your classroom.** (the sum of all the numbers above should equal this total.)

9. What are the ethnic identities of the children in your classroom this year?

Ethnic Group

Number of Children

1) _____

2) _____

3) _____

4) _____

10. What are the native languages of the children in your classroom this year and how many are fluent in the language you use in the classroom?

- a) Language used in your classroom: _____
- b) Number of children for whom this is their native language: _____
- c) Number of children in your room whose native language is different from the language used in your classroom: _____
- d) Number of different native languages of the children in your classroom: _____
- e) Number of children in your room who have limited ability to speak the language used in your classroom: _____

II. Parent Involvement

Please read the following statements and indicate about how often the following activities occur. (Circle one response that best indicates how often each activity occurs.)

- a) Parent or volunteer eats lunch with children.

<i>never</i>	<i>1-2 times a school year</i>	<i>4-6 times a school year</i>	<i>about once a month</i>	<i>2-3 times a month</i>	<i>every week</i>	<i>every day</i>
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- b) Parent or volunteer is with children in room.

<i>never</i>	<i>1-2 times a school year</i>	<i>4-6 times a school year</i>	<i>about once a month</i>	<i>2-3 times a month</i>	<i>every week</i>	<i>every day</i>
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- c) Breakfast or lunch served at school for parents and children.

<i>never</i>	<i>1-2 times a school year</i>	<i>4-6 times a school year</i>	<i>about once a month</i>	<i>2-3 times a month</i>	<i>every week</i>	<i>every day</i>
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- d) Student performances or programs for parents.

<i>never</i>	<i>1-2 times a school year</i>	<i>4-6 times a school year</i>	<i>about once a month</i>	<i>2-3 times a month</i>	<i>every week</i>	<i>every day</i>
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- e) Conferences with parents to discuss a child's progress.

<i>never</i>	<i>1-2 times a school year</i>	<i>4-6 times a school year</i>	<i>about once a month</i>	<i>2-3 times a month</i>	<i>every week</i>	<i>every day</i>
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- f) Reports sent to parents about the child's progress.

<i>never</i>	<i>1-2 times a school year</i>	<i>4-6 times a school year</i>	<i>about once a month</i>	<i>2-3 times a month</i>	<i>every week</i>	<i>every day</i>
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- g) Workshops provided to parents to discuss parenting issues or to given them advice about parenting.

<i>never</i>	<i>1-2 times a school year</i>	<i>4-6 times a school year</i>	<i>about once a month</i>	<i>2-3 times a month</i>	<i>every week</i>	<i>every day</i>
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III. BELIEFS AND PRACTICES

Below are a number of statements about beliefs teachers may hold about teaching and practices they might use. Read each statement carefully and decide if you do or do not agree with it. Indicate whether you agree or disagree with a statement by circling the response that best describes your feelings about it.

- 1) When there are behavior problems in the classroom, teachers should have a group discussion and ask children to suggest ways to solve the problem.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 2) In the past 6 months I have gotten good ideas about how to teach from my supervisor.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 3) I try to ask children questions that lead them into telling me how they think about the world.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 4) Teachers know most of what they need to know about teaching after they finish their specialized training.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 5) Young children learn new ideas best when teachers give them information to practice and memorize.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 6) When a child asks me a question and I don't know the answer, I say I don't know and together we try to find the answer.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 7) In the past two years I have been able to take part in professional development activities that have made important differences in the way I teach.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 8) When there are behavior problems in the classroom teachers should review classroom rules and punish those who break the rules.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 9) Teachers must constantly be learning new pedagogical methods.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 10) Children should be involved in establishing rules for the classroom.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 11) Young children learn new ideas best when they have opportunities to play with materials that allow them to experience the concept.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 12) In the past 3 months I have gotten good ideas about how to teach from other teachers I work with.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 13) When teachers ask a child a question, they are curious about how that child understands the world and often do not have a particular answer that they expect the child to give.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 14) Experienced teachers know what children need and should establish classroom rules without discussion.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 15) When a child asks me a question and I don't know the answer, I avoid responding until I can find out.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 16) In the past two years I have not had been given opportunities to learn ways to improve my teaching skills.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 17) When I ask a child a question I am usually checking to see if he or she understands something that I taught.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 18) Young children should be allowed to choose many of their own activities from among a number of activity areas that the teacher has provided.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 19) In the past 6 months my supervisor has been concerned mostly with administrative issues and has not been able to help me grow professionally.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 20) Young children learn best when their activities are well planned out for them and the teacher tells them what activity they should do.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 21) When teachers ask children questions, they want to find out if children have learned what they have been taught.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

- 22) In the past 6 months I have had little occasion to discuss instruction with other staff in my kindergarten.

Strongly Disagree *Disagree* *Agree* *Strongly Agree*

IV. GOALS FOR CHILDREN

Below are listed goals that a kindergarten teacher might have for her children. Read each goal carefully and decide whether or not that you believe it is appropriate and important for kindergarten children. Indicate your response by circling the phrase that best describes your feeling. Think of each item as completing this phrase: **Kindergarten children should**

- | | | | | |
|--|-------------------|---------------------------|------------------|-----------------------|
| 1) Learn to write their own name. | <i>Not at all</i> | <i>Somewhat important</i> | <i>Important</i> | <i>Very important</i> |
| 2) Learn how to make choices. | <i>Not at all</i> | <i>Somewhat important</i> | <i>Important</i> | <i>Very important</i> |
| 3) Learn to solve problems with other children. | <i>Not at all</i> | <i>Somewhat important</i> | <i>Important</i> | <i>Very important</i> |
| 4) Become comfortable asking the teacher questions when they are puzzled or curious. | <i>Not at all</i> | <i>Somewhat important</i> | <i>Important</i> | <i>Very important</i> |
| 5) Understand the concept of adding (i.e., putting together makes more). | <i>Not at all</i> | <i>Somewhat important</i> | <i>Important</i> | <i>Very important</i> |
| 6) Learn to select a task and keep working on it. | <i>Not at all</i> | <i>Somewhat important</i> | <i>Important</i> | <i>Very important</i> |
| 7) Develop a love of books and reading. | <i>Not at all</i> | <i>Somewhat important</i> | <i>Important</i> | <i>Very important</i> |
| 8) Learn to pay attention during large group activities. | <i>Not at all</i> | <i>Somewhat important</i> | <i>Important</i> | <i>Very important</i> |
| 9) Learn how to copy letters and words. | <i>Not at all</i> | <i>Somewhat important</i> | <i>Important</i> | <i>Very important</i> |
| 10) Learn how to count to 20. | <i>Not at all</i> | <i>Somewhat important</i> | <i>Important</i> | <i>Very important</i> |
| 11) Learn to follow a teacher's directions. | <i>Not at all</i> | <i>Somewhat important</i> | <i>Important</i> | <i>Very important</i> |
| 12) Learn to be responsible for tasks in their classroom. | <i>Not at all</i> | <i>Somewhat important</i> | <i>Important</i> | <i>Very important</i> |
| 13) Learn to write the letters of the alphabet. | <i>Not at all</i> | <i>Somewhat important</i> | <i>Important</i> | <i>Very important</i> |
| 14) Experiment with materials. | | | | |

Not at all

Somewhat important

Important

Very important

Table N-1: NAEYC Summary Scores

Measure	Country	Step by Step ^a			Expansion			Traditional			Signif.	η^2
		M	SD	n	M	SD	n	M	SD	n		
Staff-child Interactn Summary	Bulgaria	2.76	.31	10	2.68	.28	10	2.37	.41	10	I,E>T	.217
	Kyrgyzstan	2.81	.19	10	2.73	.28	10	2.16	.48	10	I,E>T	.463
	Romania	2.57	.21	10	2.73	.37	10	2.06	.34	10	I,E>T	.356
	Ukraine	2.68	.29	10	2.41	.25	10	1.82	.41	10	I,E>T	.621
	<i>Overall</i>	2.71	.44	40	2.61	.31	40	2.10	.44	40	.0001	.43
Curriculum Summary	Bulgaria	2.76	.16	10	2.64	.27	10	2.23	.29	10	I,E>T	.521
	Kyrgyzstan	2.88	.10	10	2.84	.20	10	2.05	.38	10	I,E>T	.711
	Romania	2.48	.23	10	2.33	.35	10	1.88	.31	10	I,E>T	.449
	Ukraine	2.70	.23	10	2.57	.28	10	1.85	.21	10	I,E>T	.740
	<i>Overall</i>	2.70	.23	40	2.60	.32	40	2.00	.33	40	.0001	.57
Environment Summary	Bulgaria	2.9	.32	10	2.7	.48	10	1.7	.48	10	I,E>T	.765
	Kyrgyzstan	3.0	0	10	2.9	.32	10	1.7	.68	10	I,E>T	.699
	Romania	3.0	0	9	2.7	.48	10	1.5	.71	10	I,E>T	.854
	Ukraine	2.7	.48	10	2.6	.52	10	1.5	.53	10	I,E>T	.636
	<i>Overall</i>	2.90	.31	39	2.73	.45	40	1.60	.59	40	.0001	.75

Table N-2: Interactions Among Staff and Children

Item/Indicator	Country	Step by Step			Expansion			Traditional			Signif.	η ²	
		M	SD	n	M	SD	n	M	SD	n			
A1. Staff-child interaction freq.	Bulgaria	2.7	.67	10	2.8	.42	10	2.1	.88	10	I,E>T	.185	
	Kyrgyzstan	3.0	0	10	2.9	.32	10	2.1	.88	10	I,E>T	.384	
	Romania	2.56	.73	9	2.5	.84	10	1.5	.53	10	I,E>T	.343	
	Ukraine	2.8	.42	10	2.8	.42	10	1.7	.67	10	I,E>T	.525	
	Overall	2.77	.54	39	2.75	.54	40	1.85	.77	40	.0001	.319	
	Country	percentage			percentage			percentage			χ ²	p	Cramer's V
A1-1. Interact with children nonverb.	Bulgaria	100			100			90					.26
	Romania	90			80			50					.38
	Ukraine	90			100			80					.27
	Overall	93			93			73			6.92	.031	.28
A1-2. Talk and listen children	Bulgaria	90			90			60					.35
	Romania	90			90			40					.53
	Ukraine	90			90			70					.25
	Overall	90			90			57			13.3	.001	.39
A1-3. Meaningful conversation	Bulgaria	80			90			60					.30
	Romania	90			90			50					.45
	Ukraine	100			90			10					.85
	Overall	90			90			40			25.6	.001	.53

	Country	Step by Step			Expansion			Traditional			Signif.	η^2	
		M	SD	n	M	SD	n	M	SD	n			
A2. Staff avail./responsive to children	Bulgaria	2.6	.52	10	2.7	.48	10	2.1	.88	10	I,E>T	.153	
	Kyrgyzstan	3.0	0	10	2.67	.50	9	2.3	.82	10	I,E>T	.232	
	Romania	2.6	.52	10	2.6	.52	10	2.0	.67	10	I,E>T	.214	
	Ukraine	2.8	.42	10	2.5	.53	10	2.0	0	10	I,E>T	.443	
	Overall	2.75	.44	40	2.62	.49	39	2.1	.67	40	.0001	.219	
	Country	percentage			percentage			percentage			χ^2	p	Cramer's V
A2-1. Listens with attention, respect	Bulgaria	100			100			60			23.5	.001	.56
	Romania	100			90			60					.46
	Ukraine	100			90			50					.54
	Overall	100			93			57					.51
A2-2. Responds to questions, requests	Bulgaria	90			100			60			6.86	.032	.46
	Romania	100			100			90					.26
	Ukraine	100			90			90					.19
	Overall	97			97			80					.28
A2-3. Aware of classroom even when in small group	Bulgaria	90			80			50			12.4	.002	.38
	Romania	80			70			70					.11
	Ukraine	100			100			40					.71
	Overall	90			83			53					.37
A2-4. Obs. children w/o interrupting	Bulgaria	60			70			60			11.97	.003	.10
	Romania	70			70			20					.47
	Ukraine	80			60			10					.59
	Overall	70			67			30					.37

Item/Indicator	Country	Step by Step			Expansion			Traditional			Signif.	η^2	
		M	SD	n	M	SD	n	M	SD	n			
A3a. Staff speak frndly/courteous to chldn	Bulgaria	2.9	.31	10	2.8	.42	10	2.4	.70	10	I,E>T	.169	
	Kyrgyzstan	2.8	.42	10	2.7	.48	10	1.9	.74	10	I,E>T	.361	
	Romania	2.6	.52	10	2.5	.53	10	2.1	.57	10	I,E>T	.152	
	Ukraine	2.7	.48	10	2.5	.53	10	1.8	.42	10	I,E>T	.419	
	Overall	2.75	.44	40	2.63	.49	40	2.05	.64	40	.0001	.188	
	Country	percentage			percentage			percentage			χ^2	p	Cramer's V
A3a-1. Speak often with ind. children	Bulgaria	90			90			60					.35
	Romania	70			80			40					.35
	Ukraine	90			90			20					.70
	Overall	83			87			40			19.4	.001	.46
A3a-2. Include children in conv.	Bulgaria	90			70			60					.28
	Romania	80			70			70					.11
	Ukraine	90			80			30					.56
	Overall	87			73			53			8.22	.016	.30
A3a-3. Speak at eye level	Bulgaria	90			90			50					.45
	Romania	100			90			50					.54
	Ukraine	80			70			30					.44
	Overall	90			83			43			19.1	.001	.46
A3a-4. Call child by name	Bulgaria	90			100			100					.26
	Romania	100			100			100					0
	Ukraine	100			100			90					.26
	Overall	97			100			97			1.02	.600	.11

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2	
		M	SD	n	M	SD	n	M	SD	n			
A3b. Staff encourage all to use lang.	Bulgaria	2.6	.70	10	2.4	.70	10	1.9	.88	10	I,E>T	.142	
	Kyrgyzstan	2.7	.48	10	2.7	.48	10	2.0	.82	10	I,E>T	.243	
	Romania	2.5	.52	10	1.9	.57	10	2.1	.88	10	NS	.132	
	Ukraine	2.7	.48	10	2.3	.48	10	2.0	.82	10	NS	.195	
	Overall	2.63	.62	40	2.33	.62	40	2.0	.82	40	.0003	.079	
	Country	percentage			percentage			percentage			χ^2	p	Cramer's V
A3b-1. Staff ask open-Ended questions	Bulgaria	70			90			60					.28
	Romania	100			80			90					.27
	Ukraine	80			70			70					.11
	Overall	83			80			73			0.93	.627	.10
A3b-2. Encourage children to discuss experiences	Bulgaria	90			60			40					.43
	Romania	50			30			40					.17
	Ukraine	90			60			40					.43
	Overall	77			50			40			8.73	.013	.31

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2
		M	SD	n	M	SD	n	M	SD	n		
A4a. Staff unbiased to creed/class/cltr	Bulgaria	3.0	0	7	2.57	.79	7	2.63	.52	8	NS	.122
	Kyrgyzstan	2.8	.42	10	2.9	.32	10	2.8	.42	10	NS	.016
	Romania	2.4	.70	10	2.2	.79	10	1.8	.63	10	I,E>T	.121
	Ukraine	2.4	.70	10	2.2	.42	10	1.4	.52	10	I,E>T	.400
	<i>Overall</i>	2.62	.59	37	2.46	.65	37	2.13	.78	38	.001	.155
A4b. Staff give M/F equal opps/activities	Bulgaria	3.0	0	10	2.9	.32	10	3.0	0	10	NS	.069
	Kyrgyzstan	2.6	.70	10	2.7	.67	10	2.4	.84	10	NS	.030
	Romania	2.0	.67	10	2.2	.63	10	2.0	.67	10	NS	.022
	Ukraine	2.6	.70	10	2.7	.67	10	1.7	.67	10	I,E>T	.325
	<i>Overall</i>	2.55	.68	40	2.63	.63	40	2.28	.78	40	.029	.072

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2	
		M	SD	n	M	SD	n	M	SD	n			
A5. Staff	Bulgaria	2.70	.48	10	2.60	.52	10	2.40	.52	10	NS	.063	
Encourage Chld's	Kyrgyzstan	3.00	0	10	2.80	.63	10	2.40	.84	10	I,E>T	.157	
Independence	Romania	2.80	.42	10	2.70	.48	10	2.33	.50	9	I,E>T	.165	
	Ukraine	2.70	.48	10	2.70	.48	10	2.10	.32	10	I,E>T	.320	
	Overall	2.80	.41	40	2.70	.52	40	2.31	.57	39	.0001	.213	
	Country	percentage			percentage			percentage			χ^2	p	Cramer's V
A5-1. Children	Bulgaria	80			80			100					.28
Responsible for	Romania	100			90			100					.26
Performing jobs	Ukraine	90			90			100					.19
	Overall	90			87			100			4.03	.133	.21
A5-2. Children	Bulgaria	100			100			100					0
Responsible for	Romania	100			90			90					.19
Self-help	Ukraine	100			80			100					.38
	Overall	100			90			97			3.66	.160	.20
A5-3. Children	Bulgaria	100			80			40					.56
Choose activities	Romania	90			90			30					.62
	Ukraine	80			90			10					.73
	Overall	90			87			27			34.9	.001	.62

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2
		M	SD	n	M	SD	n	M	SD	n		
A6a. Positive Approach to Chld Behavior	Bulgaria	2.6	.70	10	2.1	.74	10	1.6	.70	10	I,E>T	.267
	Kyrgyzstan	2.7	.48	10	2.5	.71	10	1.8	.79	10	I,E>T	.268
	Romania	2.2	.42	10	2.2	.92	10	1.5	.71	10	I,E>T	.193
	Ukraine	2.3	.67	10	2.2	.63	10	1.4	.52	10	I,E>T	.325
	Overall	2.45	.60	40	2.25	.74	40	1.58	.68	40	.0001	.309
		Country	percentage		percentage		percentage		χ^2 p		Cramer's V	
A6a-1. Rules dev. with undrstdng by children	Bulgaria		100		80		50					.49
	Romania		60		70		50					.17
	Ukraine		60		50		30					.25
	Overall		73		67		43		6.27	.044		.26
A6a-2. Describe sit. to child	Bulgaria		80		40		30					.43
	Romania		80		70		50					.27
	Ukraine		80		80		20					.58
	Overall		80		63		33		13.9	.001		.39
A6a-3. Logical consequences applied	Bulgaria		80		70		40					.35
	Romania		70		70		40					.29
	Ukraine		80		70		30					.44
	Overall		77		70		37		11.6	.003		.36

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2
		M	SD	n	M	SD	n	M	SD	n		
A6b. Do not use phys. punishment or negtve discipln	Bulgaria	2.7	.67	10	2.8	.42	10	2.7	.67	10	NS	.007
	Kyrgyzstan	3.0	0	10	3.0	0	10	2.8	.42	10	NS	.143
	Romania	2.9	.32	10	2.7	.48	10	2.4	.70	10	I,E>T	.146
	Ukraine	2.9	.32	10	2.9	.32	10	2.2	.63	10	I,E>T	.377
	<i>Overall</i>	2.88	.40	40	2.85	.36	40	2.53	.64	40	.002	.145
A7. Overall sound of group is pleasant	Bulgaria	2.9	.32	10	3.0	0	10	2.9	.32	10	NS	.036
	Kyrgyzstan	3.0	0	10	2.9	.32	10	2.2	.79	10	I,E>T	.369
	Romania	3.0	0	10	2.7	.48	10	2.7	.48	10	NS	.125
	Ukraine	2.9	.32	10	2.8	.42	10	2.0	.67	10	I,E>T	.428
	<i>Overall</i>	2.95	.22	40	2.85	.36	40	2.45	.68	40	.0001	.122
A8a. Chldn rlx'd, comfrtble, invlvd in play/other acts	Bulgaria	3.0	0	10	3.0	0	10	3.0	0	10	NS	---
	Kyrgyzstan	3.0	0	10	3.0	0	10	2.1	.74	10	I,E>T	.524
	Romania	3.0	0	10	3.0	0	10	2.4	.84	10	I,E>T	.273
	Ukraine	2.9	.32	10	3.0	0	10	2.0	.67	10	I,E>T	.553
	<i>Overall</i>	2.98	.16	40	3.00	0	40	2.38	.74	40	.0001	.290

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2
		M	SD	n	M	SD	n	M	SD	n		
A8b. Staff help chldrn spk emo, feelings, comftr	Bulgaria	2.78	.67	9	2.6	.70	10	1.89	.78	9	I,E>T	.238
	Kyrgyzstan	2.56	.73	9	2.5	.71	10	1.90	.74	10	I,E>T	.159
	Romania	2.30	.48	10	2.4	.70	10	1.90	.32	10	I,E>T	.159
	Ukraine	2.40	.52	10	2.7	.48	10	1.90	.74	10	I,E>T	.258
	<i>Overall</i>	2.50	.60	38	2.55	.64	40	1.89	.64	39	.0001	.227
A9. Staff encourage prosocial beh.	Bulgaria	2.70	.67	10	2.60	.70	10	2.40	.70	10	NS	.035
	Kyrgyzstan	2.70	.48	10	2.60	.70	10	2.00	.82	10	I,E>T	.187
	Romania	2.70	.67	10	2.20	.63	10	2.22	.67	9	NS	.123
	Ukraine	2.90	.32	10	2.40	.52	10	1.80	.92	10	I,E>T	.358
	<i>Overall</i>	2.75	.54	40	2.45	.64	40	2.10	.79	39	.0002	.097
A10. Expectations of social behavior dev. Appropriate	Bulgaria	2.9	.32	10	2.9	.32	10	2.7	.67	10	NS	.043
	Kyrgyzstan	3.0	0	10	2.8	.42	10	1.9	.88	10	I,E>T	.447
	Romania	3.0	0	10	2.7	.48	10	2.3	.67	10	I,E>T	.285
	Ukraine	2.9	.32	10	2.9	.32	10	1.8	.79	10	I,E>T	.522
	<i>Overall</i>	2.95	.22	40	2.83	.38	40	2.18	.81	40	.0001	.439

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2	
		M	SD	n	M	SD	n	M	SD	n			
A11. Children are encrgd to speak feelings, not force	Bulgaria	2.4	.70	10	2.4	.70	10	2.0	.94	10	NS	.060	
	Kyrgyzstan	2.4	.84	10	2.3	.67	10	2.0	.47	10	NS	.065	
	Romania	2.3	.48	10	2.0	.67	10	1.9	.57	10	NS	.088	
	Ukraine	2.3	.48	10	2.6	.52	10	1.8	.92	10	I,E>T	.213	
	Overall	2.35	.622	40	2.33	.66	40	1.93	.73	40	.009	.137	
	Country	percentage			percentage			percentage			χ^2	p	Cramer's V
A11-1. Intervene quickly and stop force	Bulgaria	90			70			60					
	Romania	80			80			60					
	Ukraine	60			70			50					
	Overall	77			73			57			3.21	.200	.19
A11-2. Discuss alt. solutions	Bulgaria	60			70			40					
	Romania	50			50			40					
	Ukraine	60			50			20					
	Overall	57			57			33			4.36	.113	.22

Table N-3: Curriculum

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2
		M	SD	n	M	SD	n	M	SD	n		
B4. Balanced daily schedule	Kyrgyzstan	2.80	.42	10	3.00	0	9	2.22	.83	9	NS	.292
	Romania	3.00	0	6	2.72	.48	7	2.13	.35	8	I,E>T	.552
	Ukraine	2.50	.55	6	3.00	0	6	2.63	.51	8	I,E>T	.196
	<i>Overall</i>	2.77	.43	22	2.91	.29	22	2.35	.63	26	.0001	.351
B4a. Play outdoors daily	Bulgaria	2.90	.32	10	3.00	0	10	3.00	0	10	NS	.069
	Kyrgyzstan	3.00	0	10	2.90	.32	10	2.90	.32	10	NS	.036
	Romania	3.00	0	10	2.80	.63	10	2.70	.48	10	NS	.076
	Ukraine	3.00	0	10	3.00	0	10	2.90	.32	10	NS	.069
	<i>Overall</i>	2.97	.16	40	2.93	.35	40	2.88	.33	40	NS	.025
B4b. Alternate quiet/active play	Bulgaria	2.80	.42	10	2.80	.63	10	3.00	0	10	NS	.049
	Kyrgyzstan	3.00	0	10	3.00	0	10	2.50	.85	10	I,E>T	.204
	Romania	3.00	0	10	2.80	.42	10	2.60	.52	10	NS	.167
	Ukraine	3.00	0	10	2.90	.32	10	2.60	.70	10	I,E>T	.141
	<i>Overall</i>	2.95	.22	40	2.88	.40	40	2.68	.62	40	.006	.013
B4c. Multiple options for group activity	Bulgaria	3.00	0	10	2.90	.32	10	1.80	.92	10	I,E>T	.511
	Kyrgyzstan	3.00	0	10	2.90	.32	10	2.00	.94	10	I,E>T	.405
	Romania	2.90	.32	10	2.90	.32	10	1.80	.79	10	I,E>T	.522
	Ukraine	3.00	0	10	2.90	.32	10	2.10	.57	10	I,E>T	.562
	<i>Overall</i>	2.98	.16	40	2.90	.30	40	1.93	.80	40	.0001	.509

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2
		M	SD	n	M	SD	n	M	SD	n		
B4d. Balance lg/sm muscle activities	Bulgaria	2.90	.32	10	2.90	.32	10	2.80	.63	10	I,E>T	.012
	Kyrgyzstan	2.90	.32	10	3.00	0	10	2.30	.67	10	I,E>T	.364
	Romania	2.70	.48	10	2.70	.48	10	2.70	.48	10	I,E>T	.000
	Ukraine	2.90	.32	10	2.90	.32	10	2.40	.70	10	I,E>T	.212
	<i>Overall</i>	2.85	.36	40	2.88	.33	40	2.55	.64	40	.003	.191
B4e. Balance child/staff initiated Activities	Bulgaria	2.70	.67	10	2.60	.70	10	1.80	.92	10	I,E>T	.232
	Kyrgyzstan	3.00	0	10	2.90	.32	10	1.50	.71	10	I,E>T	.723
	Romania	2.70	.48	10	2.50	.53	10	1.60	.70	10	I,E>T	.433
	Ukraine	2.50	.53	10	2.20	.42	10	1.30	.48	10	I,E>T	.557
	<i>Overall</i>	2.73	.51	40	2.55	.55	40	1.55	.71	40	.0001	.348
B5a. Unbiased sex/race Materials	Bulgaria	1.38	.74	8	1.50	.85	10	1.10	.32	10	NS	.069
	Kyrgyzstan	2.80	.42	10	2.80	.42	10	2.50	.71	10	NS	.072
	Romania	1.70	.67	10	1.60	.70	10	1.20	.42	10	NS	.122
	Ukraine	2.20	.79	10	1.60	.70	10	1.00	0	10	I,E>T	.419
	<i>Overall</i>	2.05	.84	38	1.88	.85	40	1.45	.75	40	.0001	.173

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2
		M	SD	n	M	SD	n	M	SD	n		
B5d. Dev approp material present	Bulgaria	2.89	.33	9	2.90	.32	10	1.90	.57	10	I,E>T	.580
	Kyrgyzstan	2.90	.32	10	2.80	.42	10	1.70	.48	10	I,E>T	.658
	Romania	2.90	.32	10	2.50	.53	10	1.80	.42	10	I,E>T	.554
	Ukraine	2.90	.32	10	2.60	.52	10	1.60	.52	10	I,E>T	.619
	<i>Overall</i>	2.89	.30	39	2.7	.46	40	1.75	.49	40	.0001	.583
		Country	percentage		percentage		percentage		χ^2		p	Cramer's V
<i>B5d-1. Active play equipment</i>	Bulgaria		100		90		70					.37
	Romania		80		30		40					.43
	Ukraine		90		70		60					.28
	<i>Overall</i>		90		63		57		8.89	.012		.31
<i>B5d-2. Unit blocks and accessories</i>	Bulgaria		100		100		70					.47
	Romania		100		100		20					.85
	Ukraine		100		80		30					.64
	<i>Overall</i>		100		93		40		37.5	.001		.65
<i>B5d-3. Puzzle manipulative toys</i>	Bulgaria		100		100		30					.78
	Romania		100		100		80					.38
	Ukraine		100		70		20					.69
	<i>Overall</i>		100		90		43		31.8	.001		.59
<i>B5d-4. Picture books, records, instruments</i>	Bulgaria		100		100		40					.71
	Romania		90		100		80					.27
	Ukraine		100		90		70					.37
	<i>Overall</i>		97		97		63		18.0	.001		.45

	Country	percentage	percentage	percentage	χ^2	p	Cramer's V
<i>B5d-5. Art materials</i>	Bulgaria	100	100	80			.38
	Romania	100	100	90			.26
	Ukraine	100	90	60			.46
	<i>Overall</i>	100	97	77	11.8	.003	.36
<i>B5d-6. Dramatic play materials</i>	Bulgaria	90	100	80			.27
	Romania	80	80	70			.11
	Ukraine	90	90	30			.35
	<i>Overall</i>	87	90	70	4.71	.095	.23
<i>B5d-7. Sand and water toys</i>	Bulgaria	80	90	20			.64
	Romania	100	80	10			.80
	Ukraine	80	60	10			.59
	<i>Overall</i>	87	77	13	39.1	.001	.66
<i>B5d-8. Science projects</i>	Bulgaria	100	100	30			.78
	Romania	70	30	10			.52
	Ukraine	90	60	10			.66
	<i>Overall</i>	87	63	17	30.9	.001	.59

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2
		M	SD	n	M	SD	n	M	SD	n		
B7a. Hands-on activities foster pos. self-concept	Bulgaria	2.9	.32	10	2.8	.42	10	2.4	.70	10	I,E>T	.169
	Kyrgyzstan	2.9	.32	10	2.9	.32	10	1.9	.74	10	I,E>T	.499
	Romania	2.4	.52	10	2.0	.67	10	1.8	.63	10	NS	.157
	Ukraine	2.6	.52	10	2.6	.52	10	1.5	.53	10	I,E>T	.525
	<i>Overall</i>	2.70	.46	40	2.58	.59	40	1.90	.71	40	.0001	.242

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2	
		M	SD	n	M	SD	n	M	SD	n			
B7b. Develop social skills	Bulgaria	2.8	.42	10	2.5	.53	10	2.1	.57	10	I,E>T	.261	
	Kyrgyzstan	3.0	0	10	2.9	.32	10	1.6	.52	10	I,E>T	.787	
	Romania	2.1	.57	10	2.3	.48	10	1.8	.63	10	I,E>T	.128	
	Ukraine	2.6	.52	10	2.7	.48	10	1.7	.67	10	I,E>T	.414	
	Overall	2.63	.54	40	2.60	.50	40	1.80	.61	40	.0001	.316	
	Country	percentage			percentage			percentage			χ^2	p	Cramer's V
B7b-1. Space/time for blocks/dramatic play	Bulgaria	100			90			60					.46
	Romania	100			90			80					.27
	Ukraine	90			80			30					.58
	Overall	97			87			57			16.3	.001	.43
B7b-2. Chld takes responsibility for group	Bulgaria	90			70			100					.67
	Romania	90			60			70					.28
	Ukraine	90			80			70					.20
	Overall	90			70			80			3.75	.153	.20
B7b-3. Explore acceptable resp. interactions	Bulgaria	90			70			50					.36
	Romania	40			50			40					.10
	Ukraine	60			40			40					.19
	Overall	63			53			43			2.41	.300	.16
B7b-4. Time to sit talk w/ friend or adult	Bulgaria	100			80			20					.72
	Romania	50			50			30					.19
	Ukraine	90			70			60					.28
	Overall	80			67			37			12.4	.002	.37

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2	
		M	SD	n	M	SD	n	M	SD	n			
B7c. Encourage child think, reason, question, exprmnt	Bulgaria	2.6	.52	10	2.5	.53	10	1.8	.79	10	I,E>T	.266	
	Kyrgyzstan	3.0	0	10	2.8	.63	10	1.6	.84	10	I,E>T	.534	
	Romania	2.0	.67	10	2.2	.52	10	1.8	.42	10	NS	.080	
	Ukraine	2.7	.48	10	2.4	.79	10	1.9	.32	10	I,E>T	.377	
	Overall	2.58	.59	40	2.48	.60	40	1.78	.62	40	.0001	.184	
												Cramer's	
	Country	percentage			percentage			percentage			χ^2	p	V
B7c-1. Classification activities	Bulgaria	80			60			40					.33
	Romania	40			70			30					.34
	Ukraine	90			50			90					.45
	Overall	70			60			53			1.78	.411	.14
B7c-2.New Materials added	Bulgaria	90			100			50					.54
	Romania	70			80			50					.27
	Ukraine	100			60			40					.53
	Overall	87			80			47			13.4	.001	.39
B7c-3. Open-ended activities	Bulgaria	100			90			60					.46
	Romania	90			80			50					.38
	Ukraine	70			50			40					.25
	Overall	87			73			50			9.84	.007	.33
B7c-4. Routine discussed in time concepts	Bulgaria	70			60			70					.10
	Romania	50			50			80					.29
	Ukraine	90			60			60					.31
	Overall	70			57			70			1.58	.455	.13
B7c-5. Extend thinking, play, problem slvng.	Bulgaria	70			50			40					.25
	Romania	60			80			70					.18
	Ukraine	90			50			40					.44
	Overall	73			60			50			3.46	.177	.20

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2
		M	SD	n	M	SD	n	M	SD	n		
B7d. Encourage language/literacy	Bulgaria	3.0	0	10	2.7	.48	10	2.0	.47	10	I,E>T	.553
	Kyrgyzstan	2.8	.42	10	2.9	.32	10	2.6	.52	10	NS	.087
	Romania	2.2	.63	10	2.3	.67	10	1.5	.53	10	I,E>T	.271
	Ukraine	2.8	.42	10	2.6	.52	10	1.9	.32	10	I,E>T	.477
	Overall	2.69	.52	39	2.63	.54	40	2.00	.60	40	.0001	.388
		Country		percentage		percentage		percentage		χ^2 p		Cramer's V
B7d-1. Read books each day	Bulgaria	100			100			50				.63
	Romania	90			90			30				.62
	Ukraine	100			100			70				.47
	Overall	97			97			50		28.4	.001	.56
B7d-2. Provide time for conversation	Bulgaria	100			90			50				.54
	Romania	60			50			10				.44
	Ukraine	90			90			10				.78
	Overall	83			77			23		27.3	.001	.55
B7d-3. Label things in room	Bulgaria	100			100			40				.71
	Romania	90			90			50				.45
	Ukraine	100			100			90				.26
	Overall	97			97			60		20.5	.001	.48
B7d-4. Oppt. to read books	Bulgaria	90			80			60				.30
	Romania	80			90			40				.47
	Ukraine	90			80			30				.56
	Overall	87			83			43		17.0	.001	.43

	Country	percentage	percentage	percentage	χ^2	p	Cramer's V
<i>B7d-5. Write down child's exp./stories</i>	Bulgaria	90	70	10			.69
	Romania	40	20	10			.30
	Ukraine	80	50	0			.67
	<i>Overall</i>	70	47	7	21.4	.001	.53
<i>B7d-6. Answer/ask thought questions</i>	Bulgaria	90	70	50			.36
	Romania	90	90	90			0
	Ukraine	90	80	70			.20
	<i>Overall</i>	90	80	70	3.75	.153	.20
<i>B7d-7. Encourage emerging writing interests</i>	Bulgaria	90	70	70			.22
	Romania	60	70	70			.10
	Ukraine	100	80	60			.41
	<i>Overall</i>	83	73	67	2.22	.330	.16

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2
		M	SD	n	M	SD	n	M	SD	n		
B7e. Encourage Physical Dev.	Bulgaria	3.0	0	10	2.9	.32	10	3.0	0	10	NS	.069
	Kyrgyzstan	2.8	.42	10	2.7	.67	10	2.0	.67	10	I,E>T	.281
	Romania	2.6	.52	10	2.3	.67	10	2.1	.88	10	NS	.086
	Ukraine	2.7	.48	10	2.7	.48	10	2.0	.67	10	I,E>T	.285
	<i>Overall</i>	2.78	.42	40	2.65	.58	40	2.28	.75	40	.0001	.098
B7f. Safety, Wellness, nutritn	Bulgaria	2.89	.33	9	2.80	.63	10	2.80	.42	10	NS	.008
	Kyrgyzstan	2.40	.52	10	2.80	.42	10	1.90	.74	10	I,E>T	.314
	Romania	2.30	.67	10	2.00	.47	10	2.00	.67	10	NS	.056
	Ukraine	2.60	.52	10	2.70	.48	10	1.90	.57	10	I,E>T	.339
	<i>Overall</i>	2.54	.55	39	2.58	.59	40	2.15	.70	40	.0002	.101

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2	
		M	SD	n	M	SD	n	M	SD	n			
B7g. Arts Appreciation/ Expression	Bulgaria	2.70	.67	10	2.30	.67	10	1.67	.71	9	I,E>T	.295	
	Kyrgyzstan	2.90	.32	10	2.70	.48	10	1.90	.74	10	I,E>T	.415	
	Romania	2.00	.47	10	1.90	.88	10	1.50	.71	10	NS	.095	
	Ukraine	2.60	.70	10	2.30	.82	10	1.50	.53	10	I,E>T	.332	
	Overall	2.55	.64	40	2.30	.76	40	1.64	.67	39	.0001	.221	
	Country	percentage			percentage			percentage			χ^2	Cramer's p	V
<i>B7g-1. Arts offered as exploration process</i>	Bulgaria	80			70			60					.18
	Romania	80			60			60					.20
	Ukraine	90			50			20					.58
	Overall	83			60			47			8.90	.012	.31
	<i>B7g-2. Adult-made models infrequent</i>	Bulgaria	80			70			50				
Romania		20			40			40					.20
Ukraine		90			70			20					.60
Overall		63			60			37			5.09	.079	.24
<i>B7g-3. Planned and spontaneous art projects</i>		Bulgaria	80			60			30				
	Romania	80			40			20					.50
	Ukraine	70			70			40					.29
	Overall	77			57			30			13.3	.001	.38

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2
		M	SD	n	M	SD	n	M	SD	n		
B7h. Cultural Diversity Respctd	Bulgaria	2.38	.74	8	2.25	.89	8	1.70	.67	10	I,E>T	.150
	Kyrgyzstan	2.60	.52	10	2.50	.53	10	2.00	.67	10	I,E>T	.188
	Romania	1.90	.88	10	1.50	.71	10	1.50	.71	10	NS	.063
	Ukraine	2.30	.67	10	1.80	.63	10	1.20	.42	10	I,E>T	.395
	Overall	2.89	.73	38	2.00	.77	38	1.60	.67	40	.0001	.208

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2	
		M	SD	n	M	SD	n	M	SD	n			
B8. Materials and Time for Chldn to Select Activities	Bulgaria	2.9	.32	10	2.7	.48	10	1.6	.70	10	I,E>T	.570	
	Kyrgyzstan	2.9	.32	10	2.7	.48	10	1.6	.84	10	I,E>T	.510	
	Romania	2.8	.42	10	2.5	.53	10	1.6	.52	10	I,E>T	.545	
	Ukraine	2.8	.42	10	2.8	.42	10	1.4	.52	10	I,E>T	.700	
	Overall	2.85	.36	40	2.68	.47	40	1.55	.64	40	.0001	.638	
												Cramer's	
	Country	percentage			percentage			percentage			χ^2	p	V
B8-1. Several Alternative Activities	Bulgaria	100			90			50					.54
	Romania	100			100			40					.71
	Ukraine	100			100			50					.63
	Overall	100			97			47			35.0	.001	.62
B8-2. Respect Child's right Not to participate	Bulgaria	90			90			50					.45
	Romania	100			90			50					.54
	Ukraine	80			80			10					.67
	Overall	90			87			37			26.1	.001	.54
B8-3. Show int. In child's activities	Bulgaria	100			90			50					.54
	Romania	80			80			70					.11
	Ukraine	80			90			20					.64
	Overall	87			87			47			16.4	.001	.43
B8-4. Children prepare materials	Bulgaria	70			80			10					.62
	Romania	80			70			20					.53
	Ukraine	90			90			10					.78
	Overall	80			80			13			36.4	.001	.64

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2	
		M	SD	n	M	SD	n	M	SD	n			
B9. Transitions smooth, unregimented	Bulgaria	2.8	.42	10	2.7	.48	10	2.6	.52	10	NS	.032	
	Kyrgyzstan	2.9	.32	10	2.7	.48	10	1.8	.92	10	I,E>T	.393	
	Romania	2.4	.70	10	2.3	.67	10	1.4	.70	10	I,E>T	.320	
	Ukraine	2.7	.48	10	2.5	.71	10	1.9	.57	10	I,E>T	.267	
	Overall	2.70	.52	40	2.55	.60	40	1.93	.80	40	.0001	.221	
	Country	percentage			percentage			percentage			χ^2	p	Cramer's V
B9-1. Children told Ahead of time to Get ready	Bulgaria	100			100			90					.26
	Romania	70			70			80					.11
	Ukraine	90			70			80					.20
	Overall	87			80			83			.48	.787	.07
B9-2. Not required to move in group between activities	Bulgaria	90			90			30					.62
	Romania	100			100			30					.78
	Ukraine	80			90			10					.73
	Overall	90			93			23			43.7	.001	.70
B9-3. New activity prepared before children begin	Bulgaria	90			80			90					.14
	Romania	70			50			30					.33
	Ukraine	100			90			60					.46
	Overall	87			73			60			5.46	.065	.25

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2
		M	SD	n	M	SD	n	M	SD	n		
B10. Staff Flexible	Bulgaria	2.7	.67	10	2.8	.42	10	2.9	.32	10	NS	.043
	Kyrgyzstan	3.0	0	10	3.0	0	10	2.3	.82	10	I,E>T	.447
	Romania	2.6	.52	10	2.6	.52	10	2.1	.74	10	I,E>T	.285
	Ukraine	2.8	.63	10	3.0	0	10	1.7	.48	10	I,E>T	.522
	<i>Overall</i>	2.78	.53	40	2.85	.36	40	2.25	.74	40	.0001	.184

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2	
		M	SD	n	M	SD	n	M	SD	n			
B11. Routine tsks handled in rlx'd, indvdlzd manner	Bulgaria	2.8	.42	10	2.5	.71	10	2.3	.48	10	NS	.060	
	Kyrgyzstan	3.0	0	10	2.9	.32	10	2.1	.88	10	I,E>T	.065	
	Romania	2.6	.52	10	2.4	.52	10	1.9	.57	10	I,E>T	.088	
	Ukraine	2.7	.48	10	2.4	.70	10	2.0	.47	10	I,E>T	.213	
	<i>Overall</i>	2.78	.42	40	2.55	.60	40	2.08	.62	40	.0001	.157	
	Country	percentage			percentage			percentage			χ^2	p	Cramer's V
<i>B11-1. Routine tasks used as opportunities</i>	Bulgaria	70			60			30					.34
	Romania	70			40			20					.42
	Ukraine	70			60			20					.43
	<i>Overall</i>	70			53			23			13.4	.001	.39
<i>B11-2. Self-help skills encouraged</i>	Bulgaria	100			90			100					.26
	Romania	100			90			90					.19
	Ukraine	100			100			90					.26
	<i>Overall</i>	100			93			93			2.09	.351	.15
<i>B11-3. Routines tailored to children's needs</i>	Bulgaria	100			90			100					.26
	Romania	90			100			80					.27
	Ukraine	100			80			40					.56
	<i>Overall</i>	97			90			73			7.50	.024	.29

Table N-4: Physical Environment

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2
		M	SD	n	M	SD	n	M	SD	n		
G2. Space arranged to accommodate children	Bulgaria	3.0	0	10	3.0	0	10	2.5	.85	10	I,E>T	.204
	Kyrgyzstan	2.9	.32	10	3.0	0	10	2.4	.70	10	I,E>T	.281
	Romania	3.0	0	10	3.0	0	10	1.6	.84	10	I,E>T	.671
	Ukraine	2.9	.32	10	2.9	.31	10	2.0	.82	10	I,E>T	.409
	<i>Overall</i>	2.95	.22	40	2.98	.16	40	2.13	.85	40	.0001	.383

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2	
		M	SD	n	M	SD	n	M	SD	n			
G3. Space arranged for a variety of activities	Bulgaria	2.9	.32	10	2.7	.48	10	1.7	.48	10	I,E>T	.618	
	Kyrgyzstan	3.0	0	10	2.9	.32	10	1.7	.67	10	I,E>T	.677	
	Romania	3.0	0	9	2.7	.48	10	1.5	.71	10	I,E>T	.649	
	Ukraine	2.7	.48	10	2.9	.52	10	1.5	.53	10	I,E>T	.559	
	Overall	2.90	.31	39	2.73	.45	40	1.60	.59	40	.0001	.582	
	Country	percentage			percentage			percentage			χ^2	p	Cramer's V
G3-1. Block building area	Bulgaria	100			100			60					.56
	Romania	100			100			40					.71
	Ukraine	100			80			30					.64
	Overall	100			93			43			34.6	.001	.62
G3-2.Dramatic play area	Bulgaria	90			90			80					.14
	Romania	100			100			20					.85
	Ukraine	100			90			50					.54
	Overall	97			93			50			25.4	.001	.53
G3-3. Art/music area	Bulgaria	100			100			70					.47
	Romania	100			100			60					.56
	Ukraine	90			100			40					.62
	Overall	97			100			57			26.6	.001	.54
G3-4. Science area	Bulgaria	100			90			20					.78
	Romania	90			70			80					.20
	Ukraine	100			70			20					.69
	Overall	97			77			40			24.1	.001	.52

	Country	percentage	percentage	percentage	χ^2	p	Cramer's V
<i>G3-5. Quiet book area</i>	Bulgaria	100	100	50			.63
	Romania	100	100	50			.63
	Ukraine	90	90	40			.53
	<i>Overall</i>	97	97	47	31.3	.001	.59
<i>G3-6. Sand/water play available</i>	Bulgaria	80	80	0			.76
	Romania	100	80	10			.80
	Ukraine	90	90	0			.87
	<i>Overall</i>	90	83	3	57.6	.001	.80
<i>G3-7. Space to be quiet</i>	Bulgaria	90	90	30			.62
	Romania	90	70	20			.60
	Ukraine	80	80	30			.49
	<i>Overall</i>	87	80	27	28.3	.001	.56

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2	
		M	SD	n	M	SD	n	M	SD	n			
G4. Materials are age-appropriate in/outdoors	Bulgaria	3.0	0	10	3.0	0	10	1.7	.48	10	I,E>T	.843	
	Kyrgyzstan	3.0	0	10	3.0	0	10	1.9	.74	10	I,E>T	.622	
	Romania	2.9	.32	10	2.4	.52	10	1.6	.52	10	I,E>T	.601	
	Ukraine	2.9	.32	10	2.6	.70	10	1.9	.57	10	I,E>T	.391	
	Overall	2.95	.22	40	2.75	.49	40	1.78	.58	40	.0001	.581	
	Country	percentage			percentage			percentage			χ^2	p	Cramer's V
G4-1. Sufficient quantity	Bulgaria	100			100			30					.78
	Romania	100			70			40					.54
	Ukraine	90			70			20					.60
	Overall	97			80			30			33.7	.001	.61
G4-2. Durable and in good repair	Bulgaria	100			100			70					.47
	Romania	100			100			50					.63
	Ukraine	100			100			40					.71
	Overall	100			100			53			33.2	.001	.61
G4-3. Organized consistently and accessibly	Bulgaria	100			100			80					.38
	Romania	100			100			80					.38
	Ukraine	100			100			90					.26
	Overall	100			100			83			10.6	.005	.34
G4-4. Extra materials accessible to staff	Bulgaria	100			100			30					.78
	Romania	100			90			50					.54
	Ukraine	100			70			50					.47
	Overall	100			87			43			29.4	.001	.57
G4-5. Rotated and adapted to maintain interest	Bulgaria	100			100			20					.85
	Romania	90			50			50					.39
	Ukraine	100			90			20					.78
	Overall	97			80			30			33.7	.001	.61

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2
		M	SD	n	M	SD	n	M	SD	n		
G6. Private Areas play alone with friend	Bulgaria	2.80	.63	10	2.89	.33	9	1.6	.84	10	I,E>T	.482
	Kyrgyzstan	3.00	0	10	3.00	0	10	2.2	.63	10	I,E>T	.542
	Romania	2.80	.42	10	2.40	.84	10	1.1	.32	10	I,E>T	.640
	Ukraine	2.60	.70	10	2.44	.73	9	1.2	.42	10	I,E>T	.532
	<i>Overall</i>	2.80	.52	40	2.68	.62	38	1.53	.72	40	.0001	.517
G7. Soft Elements Included	Bulgaria	2.70	.48	10	2.67	.71	9	1.50	.71	10	I,E>T	.464
	Kyrgyzstan	2.90	.32	10	2.70	.48	10	2.40	.52	10	NS	.190
	Romania	2.70	.48	10	2.70	.48	10	1.20	.42	10	I,E>T	.721
	Ukraine	2.70	.67	10	2.70	.67	10	1.30	.48	10	I,E>T	.559
	<i>Overall</i>	2.75	.49	40	2.69	.57	39	1.60	.71	40	.0001	.555

Table N-5: Nutrition and Food Service

Measure	Country	Step by Step -			Expansion			Traditional			Signif.	η^2	
		M	SD	n	M	SD	n	M	SD	n			
I3. Pleasant social learning experience	Bulgaria	2.6	.52	10	2.3	.48	10	2.0	.67	10	NS	.175	
	Kyrgyzstan	2.7	.67	10	2.8	.63	10	2.3	.82	10	NS	.092	
	Romania	2.2	.63	10	2.3	.67	10	2.0	.47	10	NS	.046	
	Ukraine	2.5	.53	10	2.7	.48	10	2.5	.53	10	NS	.036	
	Overall	2.50	.60	40	2.53	.60	40	2.20	.65	40	.0303	.078	
	Country	percentage			percentage			percentage			χ^2	p	Cramer's V
I3-1. Promote good nutritional habits	Bulgaria	90			80			70					.20
	Romania	80			60			50					.26
	Ukraine	60			90			70					.28
	Overall	77			77			63			1.77	.412	.14
	I3-2. Adult(s) sit w/ children to promote conv.	Bulgaria	60			40			20				
Romania		60			40			20					.33
Ukraine		80			80			60					.21
Overall		67			53			33			6.76	.034	.27
I3-3. Serve and feed selves & help clean up		Bulgaria	90			90			80				
	Romania	60			70			60					.10
	Ukraine	90			80			90					.14
	Overall	80			80			77			.133	.935	.04
	I3-4. Equip. suitable size/dev. level	Bulgaria	100			100			80				
Romania		100			100			100					0
Ukraine		100			100			100					0
Overall		100			100			93			4.09	.129	.21

Table N-6: Family Participation

Measure	Country	Step by Step			Expansion			Traditional			Signif.	η^2	
		<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>			
J1. Family encouraged to participate in program	Bulgaria	3.0	0	10	2.8	.42	10	1.3	.48	10	I,E>T	.824	
	Kyrgyzstan	3.0	0	10	3.0	0	10	1.8	.49	10	I,E>T	.632	
	Romania	2.5	.53	10	2.6	.52	10	1.3	.48	10	I,E>T	.599	
	Ukraine	2.9	.32	10	2.5	.53	10	1.5	.53	10	I,E>T	.638	
	Overall	2.85	.36	40	2.73	.45	40	1.48	.60	40	.0001	.710	
	Country	percentage			percentage			percentage			χ^2	p	Cramer's V
J1-1. Staff make information available	Bulgaria	100			100			20					.85
	Romania	90			100			70					.37
	Ukraine	100			100			50					.63
	Overall	97			100			47			35.0	.001	.62
J1-2. Materials available to loan to families	Bulgaria	100			100			0					1.0
	Romania	90			90			50					.45
	Ukraine	90			60			30					.50
	Overall	93			83			27			35.5	.001	.63
J1-3. Children's work sent home	Bulgaria	100			80			80					.28
	Romania	90			90			80					.14
	Ukraine	80			70			30					.44
	Overall	90			80			63			6.30	.043	.27

	Country	percentage	percentage	percentage	χ^2	p	Cramer's V
<i>J1-4. Room supplied for parents to use</i>	Bulgaria	100	100	0			1.0
	Romania	100	100	0			1.0
	Ukraine	100	100	0			1.0
	<i>Overall</i>	100	100	0	90.0	.001	1.0
<i>J1-5. Staff avail. at drop-off & pick-up times</i>	Bulgaria	100	90	80			.27
	Romania	100	100	70			.47
	Ukraine	100	100	70			.47
	<i>Overall</i>	100	97	73	NA ¹		.40
<i>J1-6. Family participates in classroom act.</i>	Bulgaria	90	90	10			.78
	Romania	80	80	30			.49
	Ukraine	100	100	20			.85
	<i>Overall</i>	90	90	20	44.1	.001	.70

¹ χ^2 was invalid due to excessively small expected frequencies (consequence of small percentages in several cells)

HIGHER EDUCATION INITIATIVE PARTNERSHIPS

Bulgaria

Name of Institution	Contact Person	Type of Involvement	Period of Involvement
University of Blagoevgrad	Dimitar Dimitrov	Student instruction of Step by Step Program	Since 1997
Pedagogical College in Pleven	Anelia Rangelova	Student instruction of Step by Step Program	Since 1997
Pedagogical College of Vraza	Maria Valentinova	Student instruction of Step by Step Program	Since 1997
Pedagogical College in Bourgas	Todor Hadjipetrov	Student instruction of Step by Step Program	Since 1997
Bourgas Free University	Dimitar Dimitrov	Student instruction of Step by Step Program	Since 1997

Kyrgyzstan

Name of Institution	Contact Person	Type of Involvement	Period of Involvement
Osh State University	Tanavar Akmatova	International Training	Since 1996
Jalal-Abad State University	Kyzlarhan Tishebaeva	International Training	Since 1997
Assyk-Kyl State University	Nazgul Sholponkulova	Local Training	Since 1997
Naryn State University	Telekmatova Bernmet	Local Training	Since 1997
Kyrgyz State Pedagogical University	Tokon Orusbaeva	Local Training	Since 1997

Romania—no institutions reported

Ukraine

Name of Institution	Contact Person	Type of Involvement	Period of Involvement
Dragomanov (Ukrainian National Pedagogical University)	Liubov Artemova	<ul style="list-style-type: none"> ▪ Reading the specialized courses ▪ Student practicum ▪ Conducting seminars 	Since 1996
Kyiv Inner-Regional Retraining Institute	Lidiya Kotchina Vira Kuzmenko	<ul style="list-style-type: none"> ▪ Reading the specialized courses ▪ Pedagogical practicum ▪ Conducting seminars 	Since 1996
Kyiv Institute of Psychology	Olena Proskura	<ul style="list-style-type: none"> ▪ Reading the specialized courses 	Since 1996
Kyiv Pedagogical College #1	Svitlana Mychaylitchenko	<ul style="list-style-type: none"> ▪ Reading the specialized courses ▪ Student practicum 	Since 1996
Kyiv Pedagogical College #2	Iryna Tovkatch	<ul style="list-style-type: none"> ▪ Specialized courses ▪ Student practicum 	Since 1996
Kyiv Institute of Pedagogy (Academy of Pedagogical Sciences)	Nadiya Bibik	<ul style="list-style-type: none"> ▪ Consultant on primary initiative 	Since 1996

Name of Institution	Contact Person	Type of Involvement	Period of Involvement
Dnypropetrovsk Pedagogical College	Nina Andrieva	<ul style="list-style-type: none"> Specialized courses Student practicum Conducting seminars 	Since 1996
Dipropetrovsk Pedagogical University	Liubov Samoshkina	<ul style="list-style-type: none"> Specialized courses Student practicum 	Since 1997
Dypropetrovsk Retraining Institute	Olga Vynogradova	<ul style="list-style-type: none"> Pedagogical practicum 	Since 1997
Ivano-Frankivsk Institute of Post-Graduate Education of Pedagogues	Natalia Babiy	<ul style="list-style-type: none"> Specialized courses Student practicum 	Since 1997
Ivano-Frankivsk State University	Zoya Faytchak	<ul style="list-style-type: none"> Specialized courses Student practicum 	Since 1997
Rivne State Pedagogical Institute	Valentyna Borova	<ul style="list-style-type: none"> Specialized courses 	Since 1997
Kolomiya Pedagogical College	Galyna Mykytiuk	<ul style="list-style-type: none"> Specialized courses 	Since 1998
I. Franko (Lviv State University)	Tetyana Partyko	<ul style="list-style-type: none"> Student practicum Applied research 	Since 1998
Lviv Institute of Education	Roman Shiyan	<ul style="list-style-type: none"> Specialized courses Pedagogical practicum Conducting seminars 	Since 1997
Lviv Pedagogical College	Yaroslava Garasymiv	<ul style="list-style-type: none"> Pedagogical practicum 	Since 1996
Yalta Pedagogical College	Olga Rysenko	<ul style="list-style-type: none"> Specialized courses 	Since 1996
Uman Pedagogical Institute	Nadiya Rogalska	<ul style="list-style-type: none"> Specialized Courses 	Since 1998
Odesa Pedagogical College	Galyna Syritska	<ul style="list-style-type: none"> Specialized courses Student practicum 	Since 1996
Odesa Retraining Institute	Tetyana Kiryazova	<ul style="list-style-type: none"> Specialized courses Pedagogical practicum 	Since 1997
Odesa State Pedagogical University	Alla Kolesnyk	<ul style="list-style-type: none"> Specialized courses Student practicum 	Since 1997
Poltava Retraining Institute	Olga Simon	<ul style="list-style-type: none"> Specialized courses Pedagogical practicum 	Since 1997
Poltava State Pedagogical Institute	Olga Tchernova	<ul style="list-style-type: none"> Specialized courses Student practicum 	Since 1996
Kharkiv State Pedagogical University	Tetyana Tanyko	<ul style="list-style-type: none"> Participation at the seminars 	Since 1998
Drogobytch Pedagogical Institute	Tetyana Logvylenko	<ul style="list-style-type: none"> Participation at the seminars 	Since 1998
Lviv Institute of Physical Culture	Mykola Svarnyk	<ul style="list-style-type: none"> Consultant on the Special Education Initiative (children with disabilities) 	Since 1997
Berdiansk State Pedagogical Institute	Olena Doroshenko	<ul style="list-style-type: none"> Student practicum 	Since 1997
Brody Pedagogical College	Liubov Masunova	<ul style="list-style-type: none"> Participation at seminars 	Since 1998

ADDITIONAL INFORMATION ON STUDY SAMPLE

Table A.IV below presents the characteristics of the cities and background information on Step by Step kindergartens included in the sample. It should be noted that only four cities are listed in Ukraine. This occurred because two of the selected kindergartens were in Kyiv. This was the only instance where two Step by Step programs were sampled from the same city.

Table A.IV: Characteristics of Cities and Kindergartens in Sample

City	Population ^a	Ethnic Groups Served	Kindergartens in Sample	# of Children Served
<i>Bulgaria</i>				
Assenovgrad	70,000	<i>Bulgarian 28% Turkish 72%</i>	Nikola Vaptzarov	175
Bourgas	260,000	<i>Bulgarian 95.3% Turkish 4.7%</i>	Detelina	108
Pleven	120,000	<i>Bulgarian 97% Turkish 1.2% Vietnamese 1.2% Roma 0.6%</i>	Snezhanka	211
Rousse	200,000	<i>Bulgarian 88.9% Turkish 7.8% Roma 2.2% Armenian 0.8% Jewish 0.3%</i>	Detelina	343
Sofia	1,000,000	<i>Bulgarian 95.8% Arab 1.8% Roma 1.4% Korean 0.5% Turkish 0.5%</i>	Zornitza	230

Table II-1: Characteristics of Cities and Kindergartens in Sample (continued)

City	Population ^a	Ethnic Groups Served	Kindergartens in Sample	# of Children Served
<i>Kyrgyzstan</i>				
<i>Bishkek</i>	500,000	<i>Russian 50% Kyrgyz 33.9% Uzbek 5.6% Korean 3.6% Tatar 3.6% Dungan 1.8% Tadjik 0.9% Afghan 0.9%</i>	Kindergarten #61	112
Jalal-Abad	82,000	<i>Kyrgyz 56.1% Uzbek 22.2% Russian 16.7% Roma 2.4% Tadjik 1.7% Turkish 1.1%</i>	Ozlenok #10	180
Kara-Balta	80,000	<i>Russian 67% Kyrgyz 29.5% Korean 2% Tatar 1.5%</i>	Alenushka #2	200
Osh	280,000	<i>Uzbek 55.8% Kyrgyz 27.6% Russian 8.8% Tatar 5.9% Tadjik 1.1% Korean 0.6%</i>	Rosinka	170
Talas	43,000	<i>Kyrgyz 98% Uzbek 1.3% Russian 0.7%</i>	Ak-Beshik #15	150
<i>Romania</i>				
Botosani	129,000	<i>Romanian 100%</i>	Kindergarten #22	271
Calarasi	79,000	<i>Romanian 100%</i>	Kindergarten #4	137
Constanta	348,000	<i>Romanian 95.7% Turkish 2.6% Roma 1.7 %</i>	Kindergarten #3	135
Targoviste	99,000	<i>Romanian 95.5% Roma 4.5%</i>	Kindergarten #13	224
Tulcea	97,000	<i>Romanian 86.5% Lipoveni 10% Macedonian 2.5% Turkish 0.5% Greek 0.5%</i>	Kindergarten #3	215

Table II-1: Characteristics of Cities and Kindergartens in Sample (continued)

City	Population ^a	Ethnic Groups Served	Kindergartens in Sample	# of Children Served
<i>Ukraine</i>				
Kerch	180,000	<i>Ukrainian 60% Other (Russian, Tatar, Armenian, Bulgarian) 40%</i>	Kerch #48	230
Kyiv	3,500,000	<i>Ukrainian 85% Other (Hebrew, Russian, Polish) 15%</i>	a) Kyiv #580 b) Kyiv #317	a) 302 b) 209
Lviv	800,000	<i>Ukrainian 95% Other (Russian, Hebrew) 5%</i>	Maluk	160
Poltava	460,000	<i>Ukrainian 97% Other (Russian, Hebrew, Armenian) 3%</i>	Poltava #26	98